Influencing Behavior by Design

You may not be aware of it as you walk through a grocery store, but every aspect of the experience has been carefully designed to maximize the amount of money you will spend by the time you walk out. This includes elements like placing staples such as milk and eggs on the farthest wall from the entrance so you have to walk through other aisles to get there, putting foods with kid appeal on lower shelves so they can see and lobby for it, and putting impulse items by the cash registers to grab while you wait in line. Even the smell wafting from the bakery has been calculated to increase the number of items in your shopping cart. Though we'd like to think we are buying only needed products, we're not immune to subconscious cues.

That supermarket gauntlet does not even take into account the effects of communication about the products in the form of packaging, point-of-purchase advertising, pricing, or other pieces of information about the products themselves. What if social marketers could similarly affect people's behavior through how their environment or the product itself is designed, without even needing to resort to communicating messages to convince people to change? For example, passing a regulation requiring all residential pools to have childproof fences might be far more effective at preventing drownings than changing the daily behavior of parents and children. Altering the physical or social environment can either make it easier for someone to perform a desired behavior (e.g., vehicles with built-in child safety seats) or make it more difficult to perform an undesirable behavior (e.g., prohibiting smoking in restaurants and workplaces). If you can identify ways to create structural change, you may not need to focus on changing behavior one person at a time—usually a more difficult proposition.

Futurist and designer R. Buckminster Fuller recognized this when he said, "I made up my mind . . . that I would never try to reform man—that's much too difficult. What I would do was to try to modify the environment in such a way as to get man moving in preferred directions."[1] When we design for behavior change, we may be much more successful than if we rely on persuasion.

BEHAVIORAL ECONOMICS GIVES A NUDGE

In recent years, a slew of books—*Nudge*, *Predictably Irrational*, *Switch*, *Sway*, *Freakonomics,* and others—have popularized the field of behavioral economics as a source of ideas for understanding and changing human behavior. The foundation behind this field is that people do not

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[1]Tomkins, C. (1966, January 8). In the outlaw area. *The New Yorker,* p. 35.

always rationally weigh out the costs and benefits of a particular choice as classic economics would have us believe. Rather, people are often irrational (though they may not realize it) in choosing behaviors that may not be in their own best interest, but they do so in a predictable way. Their rational mind does not always win out over their more emotional, spontaneous nature; in the book *Nudge,* authors Richard Thaler and Cass Sunstein liken the contrast to Star Trek's logical Mr. Spock doing battle with the impulsive Homer Simpson in our heads.[2]

People have predictable mental biases that affect how they perceive situations and make decisions. If social marketers can take those inclinations into account and stack the deck in favor of the more advantageous choice, we may be able to overcome people's impulses to do things that are not necessarily in their best self-interest. According to Thaler and Sunstein, people are more likely to make an irrational choice if:

- They experience the benefits of the decision now but don't have to pay the costs until later. People who forgo saving for retirement in favor of spending the money now will have painful regrets as they approach their sunset years.

- The decision is one they make infrequently, so they do not have experience thinking through the issues. Your employer may offer an array of health plan options, but because you only have the opportunity to consider the options once a year, you may not be as familiar with the optimal features.

- They do not receive immediate feedback on the consequences of their decision. It's easy to let the air conditioner run all day when the consequences are not clear until the electricity bill arrives at the end of the month.

- They have a hard time imagining the possible outcomes of the decision and are not sure what it means in terms relevant to their lives. Telling people they used 2,000 kilowatt-hours last month may be meaningless; tell them it costs $10 a day in energy costs to keep their air conditioner running, and they will jump to raise the thermostat.

WHERE DESIGN COMES IN

When you think about how to design your approach to take into account this human struggle between choosing behaviors that make rational sense and doing what comes naturally, there are several points at which you can intervene. Many of these biases can simply be addressed through the way you craft and present your messages; Chapters 11 and 13 provide some ideas for how to design and communicate effective messages. Besides communications, the design approach, as described in this chapter, can help you determine how to shape your behavioral product and how to structure the physical or social environment.

Designing Behaviors

As discussed earlier in the context of problem analysis (Chapter 6), your issue may have several different angles from which to choose an approach. The behavior (or tangible item) you choose to promote as your main product will depend on what your audience finds acceptable

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[2]Thaler, R. H., & Sunstein, C. R. (2009). *Nudge: Improving decisions about health, wealth, and happiness.* New York: Penguin.

and doable, and if they believe it will be efficacious in preventing or reducing the problem. You will have to determine how much is too much to ask them to do. Should the behavior be broken up into small steps, taken on one at a time? Or do they need to go full bore and take on the whole thing at once to have any effect?

Think about different scenarios in which the target audience might perform the desired behavior. Identify the points along the way at which individuals could choose the competition instead. If, for example, you are promoting the reduction of household solid waste, then the action you advocate will be different based on the stage in the purchase and disposal process you target. One possibility would be to urge the consumer to buy products that come in recyclable containers (vs. nonrecyclable containers). Another approach would be to focus on the repurchase point and promote buying refills for old containers that use minimal packaging materials (vs. a new container every time). Or, looking at the point of disposal, the action could be either recycling appropriate nonorganic refuse or composting organic materials (vs. sending it to the landfill).

Another method of pinpointing what behaviors will be the most effective in tackling the problem is to identify the positive deviants—those who have positive health or social outcomes despite having similar

> ## Types of Mental Biases
>
> Some of the cognitive biases people are susceptible to include the following:
>
> - *Anchoring*—The estimate of the size or value of something depends on what you start out comparing it with, such as different price points for similar products.
>
> - *Availability*—People tend to overestimate the likelihood of events that are easily remembered, such as a plane crash, versus less familiar but more likely events such as an asthma attack.
>
> - *Representativeness*—People often impose patterns where none actually exist, such as in coin tosses or in stereotypes based on a few members of a group.
>
> - *Unrealistic optimism*—Most people estimate that they will do better than average on a task than they actually will and that problems happen to someone else.
>
> - *Loss aversion*—The level of unhappiness that people feel about something being taken away from them is much higher than the happiness they feel when they first receive it; once something is theirs, they value it more.
>
> - *Status quo bias*—Most people have a hard time overcoming inertia and will keep going on autopilot rather than making a change.
>
> - *Framing*—People will respond differently to the same information presented in either a positive or negative way (e.g., 10 out of 100 will die vs. 90 out of 100 will survive).
>
> - *Priming*—Simply asking someone what they intend to do in a given situation can affect his or her subsequent behavior.

characteristics to those who are most at risk for the problem—and figure out what they're doing differently to get the good results. Chip and Dan Heath, in their book *Switch,* call this "finding the bright spots" so you can clone them, rather than only focusing on what's broken and how to fix it.[3]

An example from the book illustrates how the design approach led to uncovering the "bright spot" behavior to promote. Save the Children came to Vietnam to address child malnutrition with virtually no budget and a short timeframe in which they needed to make a difference. Rather than jumping to the standard but not very effective solutions of trying to fix

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[3]Heath, C., & Heath, D. (2010). *Switch: How to change things when change is hard.* New York: Random House.

poverty, education, and sanitation systems, they first went to a local village and spent time with a group of mothers to identify a potential approach. They decided to weigh and measure every child in the village; when analyzing the data, they found that some of the children were actually well nourished, despite their impoverished families.

Save the Children staff spent time understanding how most families fed their children, then investigated what these families of well-nourished children were doing differently. It turned out that those families did several things that put their children in a better nutritional situation: (a) They fed the children four smaller meals a day, rather than two large ones that their stomachs could not process as well; (b) the parents actively fed the kids, rather than letting them decide how much they wanted to eat; and (c) the mothers collected tiny shrimp and crabs from the local rice paddies to mix in with the rice, along with sweet potato greens, despite these foods being considered either inappropriate for children or low class. Once the program staff discovered the critical differences that together boosted the children's nutritional status, they then designed a program where groups of families of malnourished children would prepare food together, including collecting the shrimp, crabs, and sweet potato greens. Six months later, 65 % of the children were better nourished and stayed that way, as a result of having looked for and finding a native solution that came from the villagers themselves.

Sometimes the product is an actual tangible item that needs to be physically designed to be used in a particular context. The city of Kirkland, Washington, with the assistance of Social Marketing Services, Inc., created a program called PedFlag to increase pedestrian safety.[4] Using bright yellow flags placed in holders at crosswalks around the city that do not have a traffic signal, pedestrians make themselves more visible as they cross the street. Research to identify ways to make the PedFlag program more user-friendly changed the color of the flags from their original fluorescent orange, which was confused with construction equipment, to yellow. They added to the flag the same picture of a person crossing the street holding a flag that appeared on the street sign to make it clear what they were for. The buckets holding the flags on either side of the street are sponsored by local businesses, with the slogan "Take It to Make It" emblazoned on them to emphasize the seriousness of the problem. The name of the city was included on the flagpoles to discourage people from stealing them, which had happened when people wanted to use them for waterskiing. Eighteen flags were placed at each of 63 crosswalks to make sure there were enough on both sides of the street. Within 6 months of the new program, 11.2 % of people crossing used the flags, with 24.8 % of groups crossing with a flag, a substantial increase from before the redesign.[5]

Designing Environments

Besides the product, the environment surrounding an individual affects his or her decisions as well. This can be the physical environment, such as offering safe and clean playgrounds where kids can get physically active, or the social environment, which can be affected by policies such as not allowing smoking in bars and restaurants. Creating a situation that both encourages and supports individual behavior changes increases the likelihood that those positive choices will be sustainable for the long term.

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[4]City of Kirkland. (n.d.). *PedFlag frequently asked questions.* http://www.ci.kirkland.wa.us/depart/Public_Works/Transportation___Streets/Pedestrian_Flags_-_FAQs.htm

[5]Social Marketing Services, Inc. (2008). *PedFlag usage tracking study.* http://www.pedflags.com/kirklandstudy.html

The Active Living by Design program, at the North Carolina Institute for Public Health, is built on these concepts to help communities design environments that increase opportunities for physical activity and healthful eating. The model includes cross-discipline partnerships that look at the community's needs from a socioecological perspective. The program strategy has a communication and promotion component, but the crux of it involves offering programs with activities and incentives to get people involved; advocacy to create health-supportive policies; and physical projects to impact built environments, remove barriers to physical activity, and enhance safety. See the sidebar for examples of tactics the program uses to carry out these strategies.

Just as policies and structures that facilitate people choosing the most beneficial behavior work well for health issues, they can be used for many other types of choices as well. If you want to encourage people to save money and be fiscally responsible, employer-based savings plans can automatically invest a certain percentage of the paycheck each month, including putting away the new "windfall" each time they earn a raise. Participating in the company's 401K program can be made opt-out, instead of opt-in, so that the default option increases the likelihood that employees will save for retirement.

"Environmental" changes to help the environment also abound. Simply having a recycling bin next to regular garbage cans will increase people's willingness to toss their empty water bottle in the correct container. Replacing homeowners' waste containers for nonrecyclable garbage with ones that are slightly smaller can encourage them to be more thoughtful about what they recycle or compost versus throwing away. Another example for energy conservation is

Healthy Living by Design Tactics

The Healthy Living by Design program has a five-pronged strategy, which is supported by a range of different tactics.[6] Some examples are as follows:

- Preparation
  - ☐ Develop and maintain partnerships/coalitions.
  - ☐ Conduct neighborhood assessments to identify opportunities for and barriers to active living.
  - ☐ Create interest groups to promote active living environments, such as parks, trails, greenways, and higher density mixed-use developments.

- Promotion
  - ☐ Develop active living messages and an awareness campaign based on targeted community research (focus groups, surveys, and testing).
  - ☐ Install point-of-decision prompts and cues to action in and around public and private places to promote physical activity.
  - ☐ Educate editorial boards and media outlets about ways of encouraging active living.
  - ☐ Conduct and participate in community events that can educate the public and media about active living.

- Programs
  - ☐ Organize walking, running, biking, or other clubs to promote social support for physical activity.
  - ☐ Start Safe Routes to School programs to encourage children to bicycle or walk to school.
  - ☐ Create commuter choice or other workplace incentive programs that promote the use of public transit, ridesharing, and active forms of travel.
  - ☐ Establish regular programs to attract people to a walkable town center.
  - ☐ Start neighborhood watch and safety walks to create safe communities.

(Continued)

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[6]Healthy Living by Design. (n.d.). *5P strategies & tactics.* http://www.activelivingbydesign.org/our-approach/5p-strategies-tactics

(Continued)

- Policy
  - □ Update zoning ordinances, building codes, and approval processes to encourage compact community design and a tighter mixture of activities that make it possible to work, play, shop, and go to school within walking and bicycling distance of people's homes.
  - □ Improve funding for pedestrian and cycling-oriented capital improvements and public transit.
  - □ Participate in local and regional decisions that improve funding and planning for parks, trails, and greenways.
  - □ Enhance local school district requirements to ensure that students in Grades K–12 participate in daily physical education classes.
  - □ Establish worksite policies that encourage employees to be physically active.

- Physical projects
  - □ Build physical infrastructure such as sidewalks, bike lanes, and trails that encourage walking and bicycling.
  - □ Use traffic-calming measures to make walking and bicycling safer and more comfortable.
  - □ Increase the availability of high-quality transit service within walking distance of residential, work, and shopping areas.
  - □ Install signage to highlight active transportation routes and places that support active living.
  - □ Design parks, trails, and greenways to deter crime and enhance safety.

that many European hotels require the plastic room key to be placed into a slot by the door for the lights and air conditioning to turn on. When the guest leaves the room and takes the key out, the energy-guzzling appliances turn off. When policy and structural elements are in place, persuasion is less necessary.

DESIGN PATTERNS

Many of these design approaches follow common patterns that can be applied to different types of issues. All of them have the effect of making either the desired behavior easier to do or the undesirable action more difficult. In all cases, however, the choice of which way to go must be voluntary. Otherwise, it is no longer a choice but a mandate. Our goal should be to make the choice that is the most beneficial to the target audience the one that is easiest or feels the most natural.

Designer Dan Lockton, with David Harrison and Neville Stanton, created a useful toolkit that lays out the various lenses through which you can view a problem as a design challenge, cutting across the fields of designing interactions, products, and architecture.[7] Lockton categorizes the patterns based on how they act on behavior:

- *Enabling*—enable the desired behavior by making it easier than the alternatives

- *Motivating*—motivate the behavior using education, incentives, and attitude change

- *Constraining*—make alternatives to the desired behavior more difficult or impossible

The most common design patterns fall into six categories, which are described below with examples of each.

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[7]Lockton, D., Harrison, D., & Stanton, N. A. (2009). *Design With Intent Toolkit v.0.9*. Uxbridge, UK: Brunel University Press. www.designwith intent.co.uk (Version 1.0 is now available as an expanded card deck).

Architectural

Architectural designs draw on qualities of the built environment for inspiration, using the structure of systems to influence behavior. This includes using positioning and layout to affect how people interact with the system, or the sequence in which they do things. The layout of supermarkets, as discussed earlier, falls under this category, as well as things such as the positions of buttons on websites or making stairwells more prominent than elevators to encourage physical activity. A small Dutch city called Drachten used this principle to remove all of its traffic lights, transform intersections into roundabouts, and eliminate road markings. The result has been more careful drivers and a major reduction in serious traffic accidents.

Properties of materials used to create the environment or product can also subtly guide people's behaviors. For example, rumble strips at the sides of the road give tactile feedback when someone strays across the line. Bus benches may be just comfortable enough to sit on while waiting 10 minutes but very uncomfortable to spend the night. Walkways and railings that might have been a tempting playground for skateboarders often have bumpy brickwork or metal plates bolted into the concrete to foil anyone trying to ride their board there.

Errorproofing

Effective design can help to prevent deviations from the target behavior by making it either easier to avoid errors or impossible to make an error at all. Choosing default settings that favor the desired behavior—whether in a computer program or as a policy—will likely find the majority of people not interested in changing the status quo. When determining whether a person will be registered as an organ donor, the default choice makes a huge difference. In most countries, people must explicitly opt in to register, often at the same time as applying for or renewing a driver's license. However, in some countries, people are presumed to be donors unless they make the effort to opt out. We can compare two similar countries that have opposite defaults. In Germany, where people must opt in to the program, only 12% give their consent; in Austria, which has an opt-out policy, 99% are donors.[8]

Errors can also be prevented by using interlocks—systems that only work if the desirable behavior has taken place. People who have been convicted of drinking and driving may have an ignition interlock installed on their car that only allows the car to start after they blow into the breathalyzer to prove they have not had alcohol. ATM machines do not dispense cash until you have taken your card back to ensure you do not leave it behind. Microwave ovens will not function unless the door is fully closed. Once presurgical checklists became mandatory, patient mortality rates were cut nearly in half, and complications fell by more than a third.[9]

Persuasive

The persuasive lens uses contextual information, advice, and guidance to offer feedback and cues, often through technology. Self-monitoring methods let people know their progress

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[8]Thaler, R. H. (2009, September 26). Opting in vs. opting out. *New York Times*. http://www.nytimes.com/2009/09/27/business/economy/27view.html

[9]Haynes, A. B., Weiser, T. G., Berry, W. R., Lipsitz, S. R., Breizat, A. H., Dellinger, E. P., et al. (2009). A surgical safety checklist to reduce morbidity and mortality in a global population. *New England Journal of Medicine, 360,* 491–499.

toward a goal, often in real time, or show the effect of their actions immediately. Home energy use monitors that translate the number of kilowatt-hours being used into real dollar costs let people know the effect of turning off a light or keeping the house toasty warm. Biofeedback machines give an immediate aural indication of how tense the body is and can help train users to reach a relaxed state quickly. Similarly, a diabetes monitor lets someone know how that bowl of spaghetti for dinner affected his or her blood sugar afterward.

Persuasive design tactics can also provide cues to action at just the right time, increasing the likelihood that a beneficial behavior will happen. Medicine bottles that sound tones on a timer or scheduled text messages can offer a reminder that it's time to take the next pill. In addition, many pharmacies offer automatic refills of monthly prescriptions and give people a call when it's time to pick them up to ensure that they don't forget the new supply. Automatic speed detectors that let passing cars know how fast they are going give people the opportunity to use the feedback to adjust their speed and slow down. Even the low-tech check reorder form attached to the last set of checks in the box is timed to appear at just the right time for you to order more before you run out.

Visual

The visual lens relates to how meanings and motivation are derived from patterns you see— both literally and figuratively. Making elements prominent or visible can affect whether people act on them. This can be big orange signs urging people to slow down in the construction zone, making recycling containers prominently available next to the regular garbage cans, or placing a large "donate now" button on a nonprofit's home page. Visual feedback can also come from making things transparent, such as the vacuum cleaner that lets you see exactly when it needs to be emptied or transparent "lungs" that demonstrate the effect of smoking. Often, seeing is believing, and one study found that just showing people with high cholesterol levels a scan of their own arteries so they could see the plaque buildup for themselves was enough to make them stay on their medication.[10]

Using metaphors is another design technique that can help people understand how something works by comparing it to another more familiar concept or system. The computer desktop as conceived by Apple with files, folders, and a trashcan gives you a good idea of how each element works. The PITSTOP program in the United Kingdom used the metaphor of the MOT (the Ministry of Transport test of auto safety and emissions required for cars every 3 years) to help men understand the importance of a regular health checkup. At the health checks, information was given in parking ticket, driver's license, and Auto Association card-style formats. They also created a maintenance manual in partnership with the Men's Health Forum (MHF) and Haynes publishers (famous for car maintenance manuals).

Cognitive

Design patterns in the cognitive lens draw on behavioral economics concepts to find ways to affect how people think about the issue and therefore what they decide to do. Use social proof to help people think that others like themselves are doing the behavior. When something is perceived as being popular, people are more likely to do it. Amazon.com recommendations,

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[10]Bakalar, N. (2006, May 16). Motivation: For patients, there's beauty in the ugly truth. *New York Times.* http://www.nytimes.com/2006/05/16/health/16moti.html

website subscriber "chicklets," and Facebook apps that show how many other friends are using them all work on this principle. Social psychologist Robert Cialdini tested the effect of social proof using the cards that hotels display in their rooms requesting that people reuse their towels at least once during their stay to help the environment. The guests whose cards had a generic message about the environment or helping the hotel reused their towels at a much lower rate than those whose message was that most guests at the hotel reused them, and all of them were lower than the people who received the message that most guests in that room had reused their towels (a 33% increase in response over the generic message).[11]

Framing is another cognitive approach that focuses on message design to affect people's attitudes toward the issue. The way choices are presented can make some sound more appealing than others. This is why the drink sizes at Starbucks start with "tall" and move up from there—small sounds so, well, small. When energy conservation is framed as "saving money" versus "saving the environment," people become much more interested because they can see what's in it for them. Another reframing that has occurred in recent years is that the fast food industry is no longer perceived as selling unhealthy food just because people like it, but it has become the equivalent of the tobacco industry, with its evil persona, trying to kill its customers through obesity.

Security

Finally, the security lens provides a way to look at how to use countermeasures to deter unwanted behaviors. "Surveillance" design techniques make people feel like they are being watched—whether through an open layout floor plan or active monitoring—and thereby avoid negative behaviors. Transparency of political contributions allows others to see who supports whom and to watch for effects of corruption. Surveillance methods can also be used to help elderly people who have fallen in their homes and have a security service that can monitor them and send help.

Atmospherics offer another way to design an environment to elicit or prevent particular behaviors. This uses ambient sensory effects to affect what people see, hear, smell, taste, or feel in either a pleasant or irritating manner. A high-pitched "mosquito tone" that only people who are teenagers or younger can hear has been used to keep young people from congregating in certain areas. (Although teens have turned it around for their own purposes to use as a ringtone so only they know when their cell phone is ringing.) Blue light is used in some public restrooms because it makes it difficult for IV drug users to see their veins and inject themselves. On a more pleasant note, scents such as baking bread or fresh-baked chocolate chip cookies are often used in stores or at real estate open houses to put people in a happy, buying mood.

THE DESIGN PROCESS

When designers approach a new problem, they have a well-defined process they follow to understand the audience and issue in order to design an effective solution. One of the leaders in designing social innovations, IDEO, lays out its Human-Centered Design (HCD) approach as the intersection of desirability, feasibility, and viability—all elements that must be present in a

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[11]Goldstein, N. J., Cialdini, R. B., & Griskevicius, V. (2008). A room with a viewpoint: Using social norms to motivate environmental conservation in hotels. *Journal of Consumer Research, 35,* 472–482.

Interviewing Techniques for Design Understanding

The IDEO toolkit offers some ideas for how to interview people to get the type of data that will be most helpful in understanding what, how, and why they do things. These include the following:

- *Show Me*—Have the interviewees show you their environment and the things they interact with. Ask them to walk you through the process. Take pictures and notes.

- *Draw It*—Ask participants to visually draw or diagram their experience to get an idea of how they conceptually understand and order their activities.

- *5 Whys*—Ask five "why" questions in a row in response to their answers to help people uncover and express their reasons for doing things.

- *Think Aloud*—Have participants describe out loud what they are thinking as they perform a task. This can give you insight into their motivations, concerns, perceptions, and reasoning.

product for it to work for a particular audience.[12] The HCD process also stands for the steps involved: hear, create, deliver. Stanford University's Design School (or "the d.school") offers a process that overlaps with IDEO's but breaks the steps out further:[13]

1. *Empathize:* Observe users in the context of their entire lives and engage them through qualitative research to determine what they need. Research might include individual or group interviews, ethnographic immersion, asking participants to document aspects of their lives using supplied photo or video cameras, or other ways of involving your target audience members in helping you understand their situation. Look at the problem with a "beginner's mind" and try not to make assumptions. Spend time observing before you start to interpret; move from "what" to "how" to "why."

2. *Define:* Determine an actionable problem statement to guide your efforts through a process of focusing on the issue through what you learned in the first phase. Share stories, and identify patterns and themes that emerged to build a framework that ties together what you observed. Start asking, "How might we. . . ?" questions to frame the issues.

3. *Ideate:* Expand your understanding through idea generation, flaring out to see the problem from as broad a lens as possible. Brainstorm possible solutions moving from the "How might we. . . ?" questions. (Brainstorming tips can be found in Chapter 13.) You can also "bodystorm," setting up a physical experience like a mock shop or doctor's office, to think through the elements of the situation you might not otherwise consider from the chair in your meeting room.

4. *Prototype:* Make your ideas real. Create something that users can start to play with that represents a possible solution to the problem. Try many different possibilities to see what might work. Change a single variable at a time to identify what elements are more successful.

5. *Test:* Put the prototypes into the users' lives to see how they work and refine them based on feedback gathered from the participants. Sort the results by (a) things they liked or found notable, (b) constructive criticism, (c) questions that the experience raised, and (d) ideas that the experience spurred. Figure out how to improve the prototype and move forward with production once you are satisfied with the users' response.

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[12]IDEO. (2009). *Human centered design toolkit* (2nd ed.). http://www.ideo.com/work/item/human-centered-design-toolkit/

[13]Hasso Plattner Institute of Design at Stanford University. (2009). *d.school bootcamp bootleg.* http://dschool.typepad.com/files/bootcampbootleg2009.pdf

WORKSHEET 7: APPLYING THE DESIGN APPROACH FOR BEHAVIOR CHANGE

1. What is the specific behavior you would like to influence?

_____

_____

_____

2. Who exactly should be doing the behavior (be as specific as possible)?

_____

_____

_____

3. Architectural design:

   a. How can you use positioning or layout elements to either encourage or constrain the behavior?

_____

_____

_____

   b. How can you make it more comfortable for people to do the behavior?

_____

_____

_____

4. Errorproofing design:

   a. How can you make the desired behavior be the default?

_____

_____

_____

   b. How can you force the behavior as a necessary step in another desirable process?

_____

_____

_____

5. Persuasive design:

   a. How can you show the actual effect of the behavior on the overall system for self-monitoring?

_____

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_____

(Continued)

(Continued)

    b. How can you provide a cue to action at the appropriate time?

_____
_____
_____

6. Visual design:

    a. How can you make the "right choice" or the cue to action more visible?

_____
_____
_____

    b. How can you use a metaphor of something your users are already familiar with to help them understand how or when to perform the desired behavior?

_____
_____
_____

7. Cognitive design:

    a. How can you demonstrate social proof that others are successfully engaging in the behavior?

_____
_____
_____

    b. How can you frame the behavior or the benefits of the behavior in a way that helps people see it in a more positive light?

_____
_____
_____

8. Security design:

    a. How can you encourage people to do the desired behavior because they think people are watching?

_____
_____
_____

    b. How can you use sensory effects (e.g., sound, smell, light, taste) to encourage the desired behavior?

_____
_____
_____