Behavioral Design **Toolkit**

VERSION 3.1



Deloitte.

Behavioral design combines key principles of behavioral economics with user insights and business context to help de-risk innovation and increase user adoption.

This field of thought grew from the recognition that we're not always rational about decisions. don't have all the information we need to make informed choices, and often

don't do things in our

own best interest due

to processing "errors"

result in predictable—

in our brains, which

and seemingly

"irrational"—

behaviors.

Where behavioral economics illustrates known tendencies about being human that have not changed for thousands of

vears, user research insights tell us about user needs in the here and now... the

itch to see progress is forever, but the urge to hit 20,000 steps on an exercise app is very much about life

today.

Doblin combines a design perspective

with business chops and a demonstrated track record of

helping major

market.

companies across industries launch innovations into the

While there's no such thing as a sure bet, behavioral design can take ideas that look smart on paper and kick the tires

by applying a deep knowledge of how

people *actually* behave, rather than what we think they will (or even what they themselves *swear* they will) do.

Dozens of cognitive

biases exist, but knowing the definition of, say, "confirmation bias" is

only a starting point. Behavioral design has been intentionally constructed as an application-oriented approach for usercentered problem-

solving, not just a list of biases or fun facts.

SEVEN BEHAVIORAL FACTORS FOR DESIGN

Our sense of self and who we feel we are, the "baggage" we bring to any situation, the ways in which we assess options and take action, and how we reflect after the fact all contribute to a model for human behavior and decision-making.

This four-part decision-making model provides a context for seven key **Behavioral Factors**, which ground a research, diagnostic, and synthetic framework for Behavioral Design.



DENTITY	PRECONCEPTIONS	;	ASSESSMENT			REFLECTION
CINSHIP & SELF	EXPECTATIONS	INFLUENCES	FRAMING	TIME DISTORTION	BARRIERS & ENABLERS	EXPERIENCE
A person's sense of self, both ndividually and socially	The attitudes and presumptions that people bring from prior experience	The social norms and cultural forces that shape a person's beliefs	The ways in which choices are presented	People over-value the present and poorly envision the future	Hindering and empowering peoples' ability to make choices or reach goals	The structure, sequencing, and feedback delivered during an interaction
A user's sense of "who I am" (or want to be) at any given time informs their decisions.	Personal experience and values illuminate the paths that users are more likely to take.	Considering external guides and norms provides insights into user influences.	The language, order, and context of choices creates (or hides) a sense of user options.	A user's present context dominates, and the future always comes faster than we think.	A user's desire to take action is easily derailed by barriers that get in the way.	Playing up experiential peaks and providing feedback helps make sense of it all for users.
ACTICS 1-2	TACTICS 3-4	TACTICS 5-8	TACTICS 9-16	TACTICS 17-20	TACTICS 21-27	TACTICS 28-30

Kinship & Self

A person's sense of self, both individually and socially

Relevant Identity New Identity

A user's sense of 'who I am' (or want to be) at any given time informs their decisions

We each carry multiple identities around with us: with work colleagues you're the responsible one, with friends you're the clown, and with your parents you still fundamentally feel like a version of your 15-year-old self. Appeals to a user's current sense of 'me' are strong—we naturally tune into information that feels personally relevant—and which 'I' is at the fore dictates the values we weigh, and even the options we consider. Our identities are sometimes in conflict, however; for example, our inability to know our future self make long-term planning difficult. In the words of the philosopher Derek Parfit, "There is no enduring "I" over time... which gives our descendent future selves the status of other people...1"

In 2003, Robert Cialdini ran an experiment to encourage hotel guests to reuse their towels. When people were told that most hotel guests reused towels, they were 26% more likely to do so... but when people were told that other guests who stayed in the same room reused their towels they were 33% more likely to use them an extra day²—a powerful example of "normative messaging". The same technique has been used to get out the vote, where informing citizens that others in their neighborhood are planning to vote increases turnout.

Expectations

The attitudes and presumptions that people bring from prior experience

Past Experience Value Exchange

Personal experience and values illuminate the paths that users are more likely to take

Users bring considerable personal context to the table when it comes to decision-making. We only have our own history to call from; this leads to 'case-based reasoning,' the application of old decision-making experiences or methodologies to new situations. Not only are we always working from limited information, filtered through our personal baggage and exposure to situations, but our ability to decide and act is also deeply influenced by our sense of what we value, and what we're willing to exchange—for example, sometimes speed or convenience wins out, but sometimes we promote a sense of belonging to a social group or a desire to be perceived an expert above all else.

Money has obvious value, but so do other less tangible things like time, social status, personal identity or convenience. When we give up one thing to get another we are forced to make difficult (and often seemingly 'irrational') decisions, especially when there is no obvious system of exchange between those 'currencies' or when emotion is likely to be a strong factor... such as exchanging convenience and speed for privacy when using an online search engine, or buying a product that is more expensive because it reinforces an important aspect of our personal identity.

It's all relative! While people often assume that hitting certain absolute targets or achievements will make them happy or signal success, it's actually where we land relative to where we started (or if we're keeping up with the Joneses, so to speak) that matters, and which is more likely to impact how we judge progress.

Influences

The social norms and cultural forces that shape a person's beliefs

Anchors Standards & Structure Social Norms Exposure to Examples

Considering external guides and norms provides insights into user influences

We are all shaped by social and cultural structures—these norms provide important guideposts to behavior. We are also hostage to more 'random' influences... whether overweighting a individual data point or allowing a single cue to dictate the value of other things (Anchoring), or simply not realizing that our personal exposure to ideas or situations will unfairly prime us to think they're more common than they actually are (Availability). Understanding the context and terrain in which users make decisions can help us design solutions more effectively.

People often use individual elements that are easy to remember and compare as stand-ins for value—we use megapixels to compare digital cameras even if we only intend to look at images on tiny phone screens. But we can also see this in education, with its emphasis on numerical and easy to compare test scores over persistence or critical thinking, or when it comes to externalities—it's easier to internalize and measure gas prices or car insurance, since we're personally responsible for those costs, than the burden of transportation infrastructure, which is abstract and hard to divvy up.

Framing

The ways in which choices are presented

Simplification
Loss
Uncertainty
Probability & Data
Tangibility
Defaults
Mental Models
Mental "Accounts"

The language, order, and context of choices creates (or hides) a sense of user options

In 1981, Amos Tversky and Daniel Kahneman problem is presented as well as by the norms, habits, and expectancies of the decision maker³." They also won the Nobel Prize in Economics for **Prospect** Theory in 2002, which identified how the way in which options are 'framed' impacts our perception of the right choice, or even what's available to choose from. A distaste for loss (Loss Aversion), an inability to understand risk and probability, and the tendencies to overweight what we hear first and all contribute to the fact that we are simply never

Loss hurts most, but the effort of doing anything is a pain. This tendency toward "status quo bias" means not only are we loss-averse when it comes to giving things up (that is, losses hurt more than equivalent gains feel good), but we are also effort-averse: no matter how much we like choice, when given the opportunity we often go with the simplest path and end up with the default option.

Our decisions are highly influenced by perceptions of risk and uncertainty. In general, alleviating these factors makes us more likely to feel confident in our decisions and actions, and how we feel about those things is often more important than what is actually true. For example, moving from a 5% chance to a 0% chance is may feel more compelling than moving from a 40% chance to a 60% chance, even though the absolute difference is smaller.

Time Distortion

People over-value the present and poorly envision the future

Selective Recall Immediacy Future Self Time Separation

A user's present context dominates, and the future always comes faster than we think

The concrete nature of the present is difficult to overcome. Anyone who has procrastinated knows all too well that we are optimistic about time—in our present-tense minds we embrace the idea that things will get done when we commit to them, but are terrible at playing out all the events that will interfere with best-laid plans. Our lousy sense of time contributes to other mental shortcuts: we underestimate how much we will adjust to circumstances, both good and bad (Adaptation); we incorrectly assume that our present-tense joy about that new car will persist over time (Affective Forecasting); and we can't envision the future well enough to effectively plan for our future selves.

A "cold state" refers to the rational, sensible side of ourselves—the one who sets the alarm clock for 6 a.m. or plans healthy meals—while our "hot state" self is the one whose visceral urges override our best intentions... the one who drowsily presses the snooze button, drinks too much, and puts salty snacks in the shopping cart when shopping on an empty stomach.

Barriers & Enablers

Hindering and empowering peoples' ability to make choices or reach goals

Goal-setting & Motivation Commitment Accountability Control Small Barriers Behavioral Models Ownership

A user's desire to take action is easily derailed by barriers that get in the way

The world is full of people who swear that this time they really will commit to New Year's resolutions, or those who get tripped up by small, seemingly inconsequential hurdles to actions that are clearly in their best interest, and on which they fully intended to follow through. Sometimes these hiccups are due to an inertia that keeps them from taking the first steps on a path to action (Status Quo Bias); at other times self-control is the issue. Most of all, we are often tripped up by the tiniest of barriers—for example, when simply having to enter a username and password to sign up for a website is enough to keep us from doing so, and provokes us to close the browser window instead.

It's well-recognized that cognitive biases and shortcuts affect decision-making, but emotions can sway even the most logical minds—'rational' decisions are often made emotionally, then rationalized after the fact. Our emotional state impacts how we make decisions in the moment, and also plays an enormous role in how we interpret past experiences or project anticipatory feelings about future ones.

Experience

The structure, sequencing, and feedback delivered during an interaction

Whole Journey Key Moments Feedback

Playing up experiential peaks and providing feedback helps make sense of it all for users

Regardless of whether decision-making is grounded in a single instance or repeated regularly, users feed each experience into their expectations for the next time. Memories of both the overall flow and peaks of an experience prepare a user for future situations; careful crafting of experiences and key moments can help users recall positive parts of the event (or deaden those less pleasant) after the fact. In a similar way, explicit signals sent through feedback (Feedback Loops) can reinforce 'good' behavior and temper actions that are less desirable. Considerations such as the source, periodicity, severity and quality of feedback don't just provide cues in the moment; they are carried forward to future events by the user, and used as fodder there.

In the 1978 documentary 'Scared Straight,' at-risk youth heard the hard truth about life behind bars from real-life imprisoned convicts. Despite the obvious terror on the faces of these would-be criminal teens, the program ultimately was found to have a neutral-to-negative effect on whether these youth pursued a life of crime: without reinforcement that extended far beyond the initial intervention, a new identity as law-abiding citizenry didn't stick once youth were back in their day-to-day environments⁴.

DESIGNING FOR BEHAVIOR **ACROSS AN EXPERIENCE**

The Compelling **Experiences** model helps us design solutions across all phases of an experience.:

ATTRACTION

How do users initially become aware of the experience?

ENTRY

What signals the beginning of the experience?

ENGAGEMENT

What occurs during the heart of the interaction?

EXIT

How do users know the experience has ended or is coming to a close?

EXTENSION

What keeps experiences front-of mind and keeps users coming back?

Behavioral design can address a user's

by recognizing and addressing situations in which they:

MINDSET

... seem confused about how to navigate options

PERCEIVED ABILITY

... seem to feel hesitant about their ability to engage

ACTION

... have trouble moving from thought to action

SENSE OF CLOSURE

... crave signals of completion or a sense of satisfaction

PERSISTENCE

... need a reason to return or will benefit from reflection

Each tactics card contains suggestions for behavioral interventions across these stages. Note that some examples "solve" these situations, while others intentionally amplify them—both may be useful depending on the situation.

WHAT PROBLEMS MIGHT BENEFIT FROM THE LENS OF BEHAVIORAL DESIGN?

Any problem that has humans at its core can likely benefit from the lens of Behavioral Design, but some lend themselves particularly well to this kind of approach. Key signals that point to behavioral interventions include:

- "I know I should"—when users' best intentions to take action in their own best interest don't result in actual follow-through
- Difficult tradeoffs, in which choosing one path negates other desirable options
- Conflicts between present tense actions and future implications, especially when there is a high degree of abstraction in outcomes or choices
- An overwhelming amount of choice
- Behaviors related to making or breaking habits
- Asking people to adopt new behaviors
- Situations that lead to *impulsive behavior*
- High levels of uncertainty or risk

In other words... pretty much any situation in which people are at risk of choosing badly or doing things that aren't in their best interest would benefit from a behavioral lens.

This is true of end users and consumers, but also of people within organizations; employees and individuals in leaderships roles are people who make decisions, too1

Relevant Identity

Speak to the 'self' who is most relevant for the user at a given time or context

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- An individual's behavior can be directly connected to a strong sense of self or core beliefs
- Specific cues, language, or environments reinforce people's sense of identity
- "That makes sense for someone like me..."

Don't Mess With Texas

To combat littering along its highways, the Texas Department of Transportation ran a public service campaign with the slogan "Don't Mess with Texas." The tone and language of the campaign called on a sense of protectiveness and pride as a tough-guy rallying stance for young men—the primary culprits—rather than a deaf ears. The PSA campaign is credited with reducing litter on Texas highways by roughly 29% during its first year and 72% within ten years⁵.

RELEVANT IDENTITY—1

				KEELVART IDERTITI		
	MINDSET	PERCEIVED ABILITY	ACTION	SENSE OF CLOSURE	PERSISTENCE	
If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:	
You may want to	Present options in ways that align with how people see themselves (e.g. a desire to be perceived as an expert) Play up a sense of nostalgia to make certain options stand out or emphasize 'right' choices	Show users specific steps that others like them have taken to made similar decisions Increase user's awareness of identity/ context mis-matches to help them pause and possibly reset (e.g. reminding a VP that she has unintentionally slipped into "mom" mode when providing advice to younger colleagues)	Make users feel 'special' or uniquely understood to increase motivation to act Tightly 'lasso' a desired behavior to personally meaningful groups (e.g. people are more likely to vote if told their neighbors have voted, or are planning to)	Provide a sense of boundaries within which a particular identity might operate (e.g. indicating when it is ok to start talking normally after being expected to stay quiet as an audience member)	Provide examples and stories of situations in which others like them have succeeded or stayed the course	

New Identity

Help users see themselves from a fresh perspective, with a new sense of self to which they relate or aspire

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- We can make a clear connection between choices and people's aspirational view of themselves (or who they could be)
- "For people in my position, that doesn't make any sense..."

More Than a Motorcycle

Harley-Davidson has positioned their core offering, motorcycles, as more than a means of transportation, but as a lifestyle its customers can make their own. Riding Harley-Davidson motorcycles has become synonymous with being a rebel or a cowboy, although most of their customers are affluent with an average age of 47 (in 2012)⁶.

NEW IDENTITY—2

	MINDSET	PERCEIVED ABILITY	ACTION	SENSE OF CLOSURE	PERSISTENCE
If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:
You may want to	Recognize and emphasize when multiple identities may conflict (e.g. loaning money or doing business with a friend or relative may create clashes between personal and business identities) Call attention to less desirable aspects of an identity that users may not be proud of, or want to downplay	Create or strengthen personal connections to build trust in a new identity that may initially seem uncomfortable (e.g. Patients Like Me provides personal and knowledge-based connections for people who have been diagnosed with certain diseases)	Create situations where people can try new identities at low risk (e.g. people who think financial advisors are "for rich people" may try an initial session if it is a gift)	Provide a clear sense of how embracing a new identity in a particular situation provided positive benefits, to help users gain confidence	Provide examples and stories of how others have enjoyed sustained benefits from adopting and developing a new identity

Past Experience

Identify when users are drawing on their past experiences to solve similar, but new, problems

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- People have a narrow or limited set of experiences to pull from that may limit their view of options or a smart course of action
- Decision-making would benefit from a broad set of inputs
- "This is how I've always done this before..."

Live and Learn

Both Fujifilm and Kodak recognized photography would transition from film to digital, and both relied on their past experience to chart courses, but in different ways. Kodak focused on the strength of their brand and marketing, a tactic that had worked well for a long time. Fujifilm relied on their expertise in chemicals and nano-scale engineering to branch out into new areas like cosmetics and medical imaging. By 2014 Kodak had filed for bankruptcy for the second time and Fujifilm had recorded net revenues of \$657 million7.

PAST EXPERIENCE—3

	MINDSET	PERCEIVED ABILITY	ACTION	SENSE OF CLOSURE	PERSISTENCE
If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:
You may want to	Leverage knowledge of past experiences that may have a strong influence on users' perceptions of new situations Provide credible counter-information and stories if users are likely to overly rely or lean on inaccurate or irrelevant past	Demonstrate how the users—or others similar to them—have been able to approach and deal with parallel situations in the past	Indicate or highlight how taking action worked out well in a similar situation Indicate or highlight how not taking action brought about negative outcomes in a similar situation		Make outcomes and learning from current situations concrete and clear, making them easier to recall and reference in the future (e.g. providing tangible reminders or "souvenirs" of a past experience can help it persist and stay front of mind)

experiences

Value Exchange

Understand how the user perceives gains and losses in an experience: what is being exchanged for what?

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- People have to give up one thing they value—either tangible or intangible, and not just financial—to get another
- There are multiple stakeholders involved, each of whom may have different value systems that are somewhat in conflict

I Tube, You Tube, We All Tube for YouTube

When YouTube launched in 2005. good money said that when it came to streaming video, people wanted high-quality media and professionally developed content... certainly there was no audience for LOL cat videos or lowquality footage of goofy back-yard stunts that ended badly. Right? Years later, with millions of videos and certifiable celebrity stars—whose brands were established from the comfort of their own bedrooms—you could safely say that YouTube is having the last laugh.

VALUE EXCHANGE—4

PERSISTENCE

SENSE OF CLOSURE

If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:
You may want to	Recognize that audiences can have different priorities or hierarchies (e.g. chemo patients may be more upset about hair loss, while physicians focus on treatment efficacy) Recognize when a user's identity or context informs what they value (e.g. someone might prefer efficiency at work but enjoy meandering on	Model examples in which different kinds of value have been compared to help users think through what's worth giving up and/or gaining (e.g. showing a teen how blowing off their good friend to hang out with the popular crowd can have negative longer term implications)	Heighten or call attention to aspects of an experience that highlight desirable aspects of user values (e.g. positioning an experience as 'once in a lifetime' can make a normally frugal person more likely to splurge) Increase perceived value by introducing urgency (e.g. through scarcity of time or availability of items)	Make the results of a user's "this for that" calculation clear Recognize when a user's relative ending point may impact their sense of satisfaction (e.g. a silver medalist can feel like the gold was within reach but slipped away; a bronze medalist is happy relative to not being on the podium at all)	Concretely remind users that what they got/gave up the last time they took action was worthwhile (e.g. if someone is hesitating to go to the gym, remind them of how much energy they felt after the last time they went)

ACTION

PERCEIVED ABILITY

MINDSET

their own time)

Anchors

Recognize which reference points shape a user's sense of scale or value

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- We observe users leaning heavily on one reference point, or measurement (whether they recognize this or not)
- There is an opportunity to create a new reference point for experiences
- "Well, how does so-and-so do it...that's how I always think about it..."

I'll Take a Venti Soy Latte

through sheer ubiquity, Starbucks has also 're-anchored' what customers are elements: high-quality, fair-trade beans; rather than just a cup of joe, they were higher prices for coffee feel ok... to the

					ANCHORS—5
	MINDSET	PERCEIVED ABILITY	ACTION	SENSE OF CLOSURE	PERSISTENCE
If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:
You may want to	Place options first—in numerical order or physical space or—help position them as anchors for items that follow Create high, low, or extreme options to help mid-range values feel more appealing (i.e. §36 seems like a deal when the top option is §50, even if it is higher than the norm)	Appeal to existing anchors to help users gain confidence with the value of an offering or associated behaviors (e.g. point out that a \$30 splurge on a bottle of wine is the equivalent of 20 minutes of their hourly rate)	Reframe offerings to help them jump categories and establish new anchors for value (e.g. Starbucks re-anchored coffee from caffeine delivery to an experience, making the higher cost acceptable) Highlight associations with 'allies' to anchor offerings to known and trusted sources (e.g. a friend-of-a-friend's recommendation may be more meaningful than	Recognize how data points—both quantitative and qualitative, like a user's past experience—may influence their read on completion (e.g. for students used to receiving A's, receiving a B can feel like a dismal and embarrassing failure)	Reinforce newly established anchors to encourage expectation-setting for the next time

a stranger's)

Standards & Structure

Highlight 'go-to' standards and structures that make the unfamiliar easier to evaluate and act upon

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- Users would benefit from using existing structures to help them weigh or prioritize options
- There are generally agreed upon 'rules of the game' that a user can easily recall
- There are influential structures in place that users may refer to without realizing it

You Can Count On Us

To address the difficulty in determining how healthy food is and how much one should eat on a diet, Weight Watchers has assigned a simple point value to a vast array of foods and recipes. Dieters set a threshold for their daily point intake, and make sure they eat less than the limit. This makes it much easier for users to stick to their diets by providing a single, streamlined standard for understanding their calorie consumption, making Weight Watchers a proven partner in weight loss.

STANDARDS & STRUCTURE—6

l	MINDSET	PERCEIVED ABILITY	ACTION	SENSE OF CLOSURE	PERSISTENCE
If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:
You may want to	Inject a sense of taxonomy or order by explicitly calling attention to existing standards (e.g. using highest SPF to select sunscreens)	Emphasize cultural standards to make actions familiar or provide a point of reference (e.g. "it takes five years to make partner") Identify when standards that are easy to measure or compare have outsize influence over better—but harder to measure—ones	Instill structures that reward and reinforce desired behaviors to guide or incent actions (e.g. leaderboards or other forms of ranking may encourage competition; Pret á Manger's "shooting star" vouchers encourage teamwork rather than individual success)	Emphasize consistency of standards or structure to encourage the internalization of a process, or a create a sense of mastery (alternately, intentionally introduce inconsistency if the intent is to create a sense of unease or disruption)	Reinforce structures in multiple contexts to make it feel more natural and habitual (e.g. ending every meeting with a round of "goals for next time" starts to encourage participants to think about goals in advance)

(e.g. using test scores, rather than qualitative measures, to indicate achievement)

Social Norms

Identify the individuals, groups, and societal norms that influence user behavior

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- Users are likely to look to others before making decisions
- Users are concerned about their reputation or how their actions might be perceived
- There are strong social expectations about the 'right' thing to do
- "This is how it's done around here, as far as I know..."

Keeping Up With the Joneses

In 2008, after years of failed financial incentives, the Sacramento Municipal Utility District successfully helped its customers reduce their energy consumption. By sending monthly statements to 35,000 customers that highlighted how their energy usage compared to their neighbors, the District found that those who received the new statements subsequently reduced their consumption by 2% more than those who received standard statements9.

	MINDSET	PERCEIVED ABILITY	ACTION	SENSE OF CLOSURE	PERSISTENCE
If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will be from reflection:

You may want to

Make social norms related to choice or decision-making clear (e.g. let guests choose first, then it's your turn)

Introduce reasons to avoid harmful social norms (e.g. explain why removing flora from natural habitats can damage ecosystems... but look out for "social proof," in which ideas people may not otherwise have considered are made more front-ofmind)

social norms that users are likely to be unfamiliar with (e.g. demonstrating how to order food or how much to tip in a foreign country) Indicate the potential results of upholding or breaking social norms when it is most likely to matter to users (e.g. calling attention to cultural forces that might shape behaviors around diet and exercise)

Model actions involving

Emphasize social norms that will resonate (e.g. remind users of promises not to let friends and family down)

Play up parts of users' identities that stand in contrast to established norms (e.g. a Canadian may feel more distinctly Canadian when in a room of Americans)

Use social norms to introduce consistency of experiences and reinforce behaviors (e.g. sporting events provide an exception to the normal rule of "don't make someone clean up after your mess")

enefit

Reinforce social norms that are most likely to keep users coming back (e.g. making promises to others)

Exposure to Examples

Recognize when user perceptions are influenced by specific, easy to recall, and visible instances

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- Current, vivid or popular examples hold a disproportionate sense of importance or weight
- People refer to specific influences or examples that indicate an inflated importance or frequency

As Seen Everywhere

Even without paying the \$100 million official partner fee for the 2012 Olympic Games, Beats headphones were ubiquitous. Customized with national colors of several countries and given to athletes for free, the headphones were hard to miss when competitors wore them right before competing. Millions watched, sales surged: Beats revenue grew from \$298 to \$519 million. In 2014, Apple acquired Beats for \$3 billion \$10,11,12.

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EXPOSURE TO EXAMPLES—8

	MINDSET	PERCEIVED ABILITY	ACTION	SENSE OF CLOSURE	PERSISTENCE
If users	seem confused	seem to feel	have trouble	crave signals of	need a reason to

about how to navigate options: hesitant about their ability to engage:

Provide success stories

for people similar to

moving from thought to action: completion or a sense of satisfaction: return, or will benefit from reflection:

You may want to Foreground compelling and relevant stories to make them front-ofmind (e.g. people may be swayed by anecdotes of a friend buying a clunker when purchasing a car, even though this doesn't reflect broader auto repair records)

Highlight less obvious information that may be drowned out by more sensational headlines

the user Recognize when users are relying on different reference points that may be in conflict (e.g. anti-vaccine proponents lean on anecdotal autism stories, while vaccine supporters recall

Spell out next steps simply and repeat them as necessary

childhood friends in iron

lungs or even deaths)

Emphasize unique and/ or motivating stories instead of relying on data (e.g. people overweight the likelihood of winning the lottery hecause the millions with losing tickets are never publicized, even if they see and rationally know that odds are strongly against them)

Craft experiences with an explicit sense of beginning-middleend to reinforce their narrative nature

Explicitly play up—or against-similarities to familiar examples to satisfy or disrupt user expectations

Make endings memorable and satisfying

Arrange cues, signals, and messages in a user's physical environment to emphasize and reinforce desired behavioral patterns (e.g. information that's present in a user's neighborhood may carry more weight because users are continually exposed to it)

Simplification

Limit, cluster, or simplify the amount of information people have to process when making decisions

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- People are overwhelmed by choice, even when they express a preference for it
- · Choices are unwieldy or complex
- People don't have a good way to judge or compare options

Don't Make Me Think

Online brokerage Betterment has vastly simplified the process of retirement investing for the typical investor. In balancing, and tax-advantaged investing tasks, Betterment advisors have already picked a diverse array of stocks and bonds. Customers need only select their desired percentage balance between the high-risk, high-return stocks, and low-risk, low-return bonds. The tedious process of weighing and selecting individual fund returns, expense ratios, and risk

SIMPLIFICATION—9

	MINDSET	PERCEIVED ABILITY	ACTION	SENSE OF CLOSURE	PERSISTENCE
If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:
You may want to	Reduce the number of options available, or reveal them in a graduated manner to limit what a user needs to consider (e.g. use rules, clustering, or clear pros/cons to reduce information overload) Call attention to what's most important to help prioritize options (e.g. provide a clear structure or order to choice-	Limit the number of decisions a user needs to make at any one time to reduce a sense of being overwhelmed Demonstrate the ease or simplicity of actions for users before they engage Suggest an option or recommendation based on user needs	Reduce the number or complexity of actions required—make it too easy not to do Reveal details when they're important or useful, not all at once Let users make only decisions that are important to them	Make the end of an experience (or completion of a process) and next steps obvious	Hide advanced options and/or features from users until they have had the opportunity to familiarize themselves with the essentials

making)

Loss

Break (or bundle) losses and gains conceptually or over time

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- Someone is struggling with multiple forms of loss or payment that can be clustered together
- It is possible to position a tradeoff to 'hide' a loss in something people value even more

Saving More For Tomorrow, Today

To encourage greater savings rates, Allianz Global Investors developed the Save More Tomorrow[™] (SMarT)program. Participants are encouraged to make savings contributions funded by future raises. Bundling the perceived loss of savings contributions with actual gains feeling the acute sense of loss they would have if the savings had come out of their regular take-home pay. The program helped boost the average participant's 401k savings rate from 3.5% to 13.6% in just 3-and-a-half years¹³.

	MINDSET	PERCEIVED ABILITY	ACTION	SENSE OF CLOSURE	PERSISTENCE
If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:
You may want to	Reframe losses as a benefit to reduce the anticipated pain of losing (e.g. "all-inclusive" sounds like a luxurious experience, even if it costs a lot)	Make the value of loss feel like it will be worthwhile (e.g. Chicago's Next restaurant charges upfront, but its prestige and walking away "without paying" is worth it to customers) Emphasize the nature of getting a "deal" (e.g. seeing a "three-for-the-price-of-one" sale may make people spring for the purchase even if they only need one item)	Hide losses in larger gains to hide them or reduce their impact (e.g. SMarT's approach to fund percentage increases in a user's 401k from annual raises) Push losses into the future (e.g. credit cards allow you to purchase and use goods while deferring payment to later)	Play up the positive aspects of an experience rather than focusing on the payment or loss	Deliver benefits through numerous touchpoints, or spread out over a span of time, to increase the pleasure of multiple gains over time

Uncertainty

Reduce user anxiety by decreasing uncertainty about outcomes of their actions or decisions

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- People are likely to be overwhelmed by indecision
- You can control the perception of certainty
- You can actually remove uncertainty

Selling Peace of Mind

At the height of the late-2000's recession, Hyundai rolled out the Assurance Program: if a new Hyundai owner lost their job, the company would buy their car back at cost. This guarantee alleviated the uncertainty and anxiety caused by the economy, shifting the fear of job loss to confidence in buying a car. During its 26-month run, sales increased 8% the first year and 24% the second, while most of its competitors were contracting. Of the 1,000,000 vehicles Hyundai sold during the Assurance Program, only 350 were

UNCERTAINTY—11

	MINDSET	PERCEIVED ABILITY	ACTION	SENSE OF CLOSURE	PERSISTENCE
If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:
You may want to	Double down on user support when people are likely to harbor distrust or have a heightened sensitivity	Make rules, processes, and consequences as explicit and transparent as possible	Use guarantees to reduce anxiety about the perceived costs of taking action	Provide feedback that signals an action was completed (e.g. a confirmation email after an order is received	Create consistency across experiences to reinforce and build on users' expectations for next time

ACTION

online shoe shopping) Make choices feel permanent or irreversible to reduce the temptation to second-guess

to things going wrong

(e.g. Zappos famously

provides superior

customer service for

MAINIDOCET

Emphasize similarities with a user's prior experiences or abilities to reduce hesitancy

DEDCENTED A DILLETT

Use familiar features across multiple items (e.g. Microsoft Office programs' familiar functions makes learning new programs easier)

Introduce scarcity to increase uncertainty and urgency to act (e.g. a countdown clock or deadlines, or the availability of goods)

Use novelty when uncertainty is a plus (e.g. even the prospect of an inexpensive Cracker Jack toy provides a sense of fun and anticipation)

CENICE OF CLOCUIDE

DEDCICTERICE

after an order is received provides confirmation to the user that their order was placed)

Insert uncertainty or upend expectations to help prevent boredom (e.g. mix things up to keep an exercise regimen from getting boring)

Probability & Data

Recognize situations in which people are likely to misinterpret the meaning of data or probability

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- Statistics are a go-to method for explaining a situation or differentiating options (i.e. healthcare)
- · Very large or small probabilities are involved

It Might Pay to Play

To combat the rising cost of treatments preventable through better medication adherence, health insurer Aetna created a test. Those taking medication were provided electronic pillboxes that entered them into a daily lottery where they could win between \$10 and \$100 for taking their medication as directed. Users won \$90 per month on average, an amount equivalent to about two emergency room visits and far less than the tens of hemorrhage or major clot¹⁵.

PROBABILITY & DATA—12

PERSISTENCE

... need a reason to

from reflection:

firmly held beliefs

return, or will benefit

SENSE OF CLOSURE

...crave signals of

completion or a

sense of satisfaction:

				SCHSC OF Satisfaction.	Tront renection.
You may want to	Use stories, rather than data, to make ideas more memorable (and "stickier") and reduce mental processing Frame numbers or	Design choices knowing that people overweight small probabilities, both large and small (e.g. people overweight the likelihood of winning the lottery or concerns about terrorism)	Provide shortcuts and simpler math, even if they are less accurate, to reduce the need for mental processing (e.g. focusing on the Uber surge pricing multiplier is more manageable mentally than actually doing the computation to figure out the cost)	Indicate results in the form of data when it can help a user see where they rank amongst others or gauge progress	Position easy-to- recall data as a goal to encourage regular habits (e.g. indicating the number of daily steps walked with a goal of hitting 10,000 per day)
	percentages as losses to heighten emotional impact (e.g. hearing you have a 20% chance of dying feels worse than hearing you have an 80% chance of surviving)				Recognize that people are more likely to digest data when it confirms things they already "know," and downplay it when it is counter to

ACTION

...have trouble

moving from

thought to action:

PERCEIVED ABILITY

hesitant about their

ability to engage:

...seem to feel

MINDSET

If users ...seem confused

about how to

navigate options:

Tangibility

Craft concrete and vivid examples that speak more directly to users and reduce abstraction

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- Examples are likely to be abstract, such as envisioning future states and events
- We can leverage specific user needs and wants, such as showing progress against that specific product you want vs. 'saving for retirement'

Next Up, Stainless Steel Appliances

Concreteness can help individuals achieve goals more readily by helping heightening their sense of impending ownership. Even people who are highly motivated benefit from this: in interviews. individuals were much more likely to set aside finances for specific items than general 'savings'—even more so when they could visually follow their progress, countertop grow over time, square foot by square foot.

TANGIBILITY—13

	MINDSET	PERCEIVED ABILITY	ACTION	SENSE OF CLOSURE	PERSISTENCE
If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:
You may want to	Highlight and/or craft vivid examples to help users envision	Measure value in easily envisioned ways to make it feel	Allow users to 'test' experiences when trying them for the first time	Provide concrete and specific items or markers to indicate the	Keep experiences fresh in users' minds with mementos, reminders,

Make the benefits of choosing different options specific and clear

potential options

more easily

more desirable and achievable (e.g. literally show progress toward purchasing a granite countertop, square foot by square foot, not just points or savings)

Force users to externalize ideas by saying things out loud or writing them down

(e.g. use trial periods and freemium models)

Play up a sense of user ownership to inspire users to commit (e.g. show users a picture of how a couch will look in their home, not just in a catalog)

completion of an action, or series of actions

and other artifacts

Provide concrete examples of future outcomes to keep users feeling motivated to make progress

Defaults

Reduce (or eliminate) effort to streamline engagement and persistence

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- People are more likely to let the status quo persist, which can prevent even initial decisions from being made
- There is a clear benefit to making a specific choice but people are likely to let laziness get in the way of taking action, such as signing up for a 401k employer match

The Easy Decision is No Decision

Although many countries allow citizens to decide whether to donate their organs in the case of a fatal accident, actual donor percentages differ when the default choice is to be an organ donor (opt-out) or not to donate (opt-in). In countries such as Germany and the Netherlands that have an opt-in policy, organ donation rates are around 20%; by contrast, in opt-out policy countries such as Austria and Belgium, donation rates often exceed 90%16.

DEFAULTS—14

	MINDSET	PERCEIVED ABILITY	ACTION	SENSE OF CLOSURE	PERSISTENCE
If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:
You may want to	Make the most common choice a default option	Make the default option, reducing pressure on the user to	Make the "best" outcome a default option, reducing		Reduce redundancy and burnout by allowing users to 'set it and
	Auto-enroll users, when possible, to eliminate	make a choice	pressure on the user to make a choice		forget it' once, rather than having to take the same or similar action
	the need to make a choice or take action		Make the default option 'opt-out' to take		repeatedly
	(e.g. where available,		advantage of effort aversion and increase		Automate or autofill
	Medicare's "seamless enrollment" can		uptake (e.g. users in opt-		when possible (e.g. autofill typing based on
	automatically enroll new		out 401k savings plans		previous responses when
	Medicare consumers in a plan that closely matches		to take advantage of the likelihood that they won't		filling out a form online)
	their existing program)		bother to dis-enroll)		

Mental Models

Tap into peoples' existing ideas about 'how things work' to provide guidance for decisions or actions

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- Users tend to reference a standard or common reference point, or way of thinking, about the situation at hand
- An easily understood metaphor can serve as a stand-in for a new experience or process
- Users don't have a sense of what 'good' looks like

If it Looks Like a Duck...

Many modern user interfaces make use of what are known as 'skeuomorphs,' defined as "a derivative object that were necessary in the original." W esee these regularly in smartphone icons and user interfaces, such as the use of photo-taking function. Skeuomorphs provide a conceptual bridge for users to underscore that the button they're about to press on a touchscreen acts similarly to products with which they are already

MENTAL MODELS—15

PERSISTENCE

SENSE OF CLOSURE

becomes uncomfortable)

If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:
'ou may want to	Use a familiar system of comparison to make comparing 'apples to apples' easier (e.g. use gas mileage, repair record, and overall cost as a baseline way to compare cars) Introduce metaphors that provide a familiar mental image or idea	Use or 'piggyback' on existing mental models to provide guidelines for how users should think and act (e.g. advice to "treat this meeting like a wedding, not a business lunch")	Explicitly highlight which actions are valued—and even expected—in a specific situation to encourage the "right" behaviors (e.g. make it clear that participation in a meeting will weigh into getting a desirable assignment if you want people to show up)	Play by the "rules" of existing mental models to bring comfortable closure to an experience or subvert them when you intentionally want to insert disruption (e.g. shaking hands at the end of a business meeting feels normal, but it if lasts a few beats too long it	Recognize when important social values—like fairness—may have carry-over effects down the road (e.g. variable pricing of building supplies after a storm may be a smart business move but turn off customers)

ACTION

PERCEIVED ABILITY

MINDSET

(e.g. "It's like Uber for hospitals")

Mental 'Accounts'

Identify how users categorize money, time, or other forms of value

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- People tend to compartmentalize costs or effort
- People are operating in a situation that falls outside their usual day-to-day norm, such as being on vacation or receiving a windfall
- There is a clear 'this for that,' such as receiving a set amount of money for a specific task

Six of One, Half Dozen of Another

Bank of America's 'Keep the Change' program rounds purchases up to the nearest whole dollar amount, depositing the difference into participants' savings accounts... in doing so, it effortlessly converts the mental category of easily dismissed spare change into real savings.

MENTAL "ACCOUNTS"—16

PERSISTENCE

SENSE OF CLOSURE

ave signals ofneed a reason to
mpletion or a return, or will benefit ense of satisfaction: from reflection:
vide opportunities users to "balance" ir accounts (e.g. in g care of pending to sc can feel like closing books) (e.g. compensating for the advance pain of going to work on Monday by having an extra slice of pizza on Sunday nights) to se accounts unwisely people have a dency to hold onto tak losers hoping they'll pack up, and sell mers because gains
v u irr

ACTION

PERCEIVED ABILITY

MINDSET

Selective Recall

Associate desired behaviors with specific experiences and actions in a user's past

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- An instance in someone's past can serve as a helpful reference point for a new decision
- Situations where people have already invested time, energy, or other resources into something (i.e. 'sunk costs')
- "It worked for me before, why not again?"
- "I figure, I've already put this much time into it..."

If It Happened Before, It Can Happen Again

With many goals, the biggest challenge is perseverance. Goal Streaks, a goals and habit tracking app, helps people track daily progress against stated goals. By visualizing their progress and success record, the app encourages people to stick with their effort, building towards increasingly longer and longer streaks.

SELECTIVE RECALL—17

SENSE OF CLOSURE

	MIINDSET	PERCEIVED ABILITY	ACTION	SENSE OF CLUSURE	PERSISTENCE
If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:
You may want to	Remind users of past experiences and what they did or might have chosen previously	Highlight past situations that demonstrate their readiness and ability to participate	Call attention to past successes or achievements to highlight progress and sustain motivation and momentum	Remind users of how prior experiences have ended to provide confidence Highlight key moments to provide a sense of completion and help users recall the overall arc of the experience	Remind users of sunk costs to heighten their sense of commitment to goals (e.g. reminders of having already paid for a gym membership to motivate exercise) Inversely, point out when they are staying the course on an activity that no longer serves a purpose (e.g. encourage switching to another book rather than finish one they aren't enjoying)

ACTION

PERCEIVED ARILITY

MINIDSET

Immediacy

Recognize that people experience gains and losses more keenly in the 'now'

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- People are likely to make smarter decisions in a more rational present-tense (i.e. 'cold state') that will help keep them on the straight and narrow during future situations that may test their willpower, patience, or emotions (i.e. 'hot state')
- Past experiences may overly influence a person's ability to make smart decisions in the 'heat of the moment'

Always Stay A Step Ahead

The team-based, socially-connected corporate wellness game A Step Ahead, by FIX, challenges employees to track against diet and exercise goals. Engagement is spurred through regularly updated story chapters, challenges, achievements and rewards, keeping players focused on the here and now, with 86% of users reporting that it helps them to walk more, and 70% saying they go to the gym more¹⁷.

IMMEDIACY—18

	MINDSET	PERCEIVED ABILITY	ACTION	SENSE OF CLOSURE	PERSISTENCE
If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:
You may want to	Help users navigate their 'hot state' impulses by using 'cold-state' strategies to 'lock' them into a course of action (e.g. making a list of explicit pros and cons; committing to plans ahead of time; or asking somebody else to serve as a moderator or coach)	ir 'hot state' impulses using 'cold-state' ustegies to 'lock' them of a course of action of making a list of licit pros and cons; mitting to plans and of time; usking somebody usto serve as a	Keep the focus on present-tense benefits of behaviors to make them feel more compelling (e.g. focus on having extra energy in the short term rather than weight loss to increase commitment to an exercise plan)	Provide short-cycle, tangible, and regular feedback on progress toward future goals	Insert "commitment checkpoints" to call attention back to the current experience, highlight key messages or strengthen engagement
			Play off social pressures to reduce impulsiveness (e.g. remind users of promises they made to others)		

Future Self

Help align users' future attitudes, motivation, and abilities with their present-tense self

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- People describe their 'future self' as particularly extra far-away or abstract
- People have clear future state needs that can be emphasized (e.g. progression stages in certain illnesses)

Paying the Price

For the approximately 2,000,000 individuals who take disulfiram (Antabuse) regularly in the United States to curb drinking alcohol, the drug accelerates the effects of a hangover to kick in five minutes after consuming a drink rather than hours later, after the damage has been done. In doing so, the drug artificially—and very effectively tightens the lasso between the 'present tense' drinker who's always up for one more and the 'future' version of that same self who all too painfully pays the price in the morning.

FUTURE SELF—19

	MINDSET	PERCEIVED ABILITY	ACTION	SENSE OF CLOSURE	PERSISTENCE
If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:
You may want to	Highlight and heighten anticipation of upcoming experiences (e.g. remind users of events yet to happen to increase future engagement)	Show users others who have achieved successful outcomes Help people combat procrastination (or "time optimism") by creating interim goals Demonstrate what future outcomes might look like (e.g. MerrillEdge's "Face Retirement" virtually ages users to heighten empathy for their future selves and increase their	Provide concrete examples of future-tense outcomes to help make them feel real and achievable Align 'planner' (present tense) and 'doer' (future tense) motivations to make follow-through more likely (e.g. put an alarm clock across the room to force the morning "doer" to get up rather than pushing the snooze button)	Provide tangible rewards and indications of progress toward goals to connect present-tense accomplishments with future-tense success	Design for the fact that users' current feelings won't persist, despite their thinking they will (e.g. tap into present tense excitement when it is still high to help users plan more effectively for the future)

tendency to save)

Time Separation

Separate (or connect) forms of value across time to shape how users perceive it

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- Placing payment or investment up front will make a future experience feel free
- The very act of paying can increase a user's sense of commitment to a course of action
- "I don't even remember when I paid the membership fee, so it felt like something out of the blue..."

No Such Thing As a Free Lunch?

Credit card companies are the masters of separating the act of purchasing from the act of payment, deferring the pain of paying for purchases far into the future when the billing cycle closes. Next restaurant in Chicago gives this strategy a twist; they charge for dinner, tax and tip in advance through a ticket system, similarly to purchasing tickets to a play or movie before attending. In doing so, diners have already paid for (and nearly forgotten) the price tag far before the actual meal, which they can then enjoy almost as though it was free.

TIME SEPARATION—20

	MINDSET	PERCEIVED ABILITY	ACTION	SENSE OF CLOSURE	PERSISTENCE
If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:
You may want to	Consider how users might reframe an experience if paying far in advance makes it feel like a "free ride" by the time it actually occurs	Push payment into the future—and make it abstract, if possible—to increase momentum to action (e.g. people accumulate purchases on credit cards more easily than when paying by cash because payment is deferred into the future)	Insert a delay, or cooling-off period, between a decision and action to reduce impulsive behavior (e.g. Gmail Goggles tests email senders with math problems to prevent "drunk emailing") Tightly couple payment and action to increase compliance (e.g. people are more likely to use a ticket they purchased yesterday than a year ago due to perceived	Separate the experience from the act of payment to mentally disassociate them (e.g. because Uber automatically computes and deducts payment from the credit card on record behind the scenes, Uber users feel like they almost don't pay for the service)	Use recurrent (rather than one-time) fees to reduce the sense of "sunk costs" and provoke commitment to action (e.g. gym use tends to increase when paying monthly for a membership v. yearly because the pain of payment recurs with higher frequency)

cost depreciation)

Goal-Setting& Motivation

Help users set sensible and achievable goals that provide long-term vision and short-term motivation

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- Users don't really know what they are working toward or for
- Users need help taking a first step
- Users have a vague sense of aspiration but no real plan how to get there

Complex Goals, Simple Tasks

At FlyLady.com, people can sign up for a free daily email newsletter, which guides them through small steps that help create easy routines targeting a common, but hard to beat, problem: How to reduce clutter and creating order in the home. Breaking a statement, like "I want to keep my home clean," down into several tasks like "Do the dishes today" helps people make progress against what could be an otherwise frustrating goal.

GOAL-SETTING & MOTIVATION—21

	MINDSET	PERCEIVED ABILITY	ACTION	SENSE OF CLOSURE	PERSISTENCE
If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:
You may want to	Appeal to a higher purpose to increase likelihood of action (e.g. a mandate at Alcoa around improving	Help users break goals down into smaller, concrete, specific steps to make them feel achievable	Use incentives—both financial and non-financial, such as not wanting to let others down—to increase	Foster a "completist" mentality to encourage progress towards goals (e.g. being a handful of items away from	Instill just enough diversity and novelty in experiences to keep users from getting bored or giving up

ACTION

Emphasize a common cause to galvanize activity on a group scale (e.g. Whole Foods employees are rewarded for performance by department, not just their individual efforts)

safety led to increased

awareness and activity

company-wide)

MAINIDOCET

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down-to increase motivation and action

Connect actions and goals to important aspects of a user's identity (e.g. "I'm going to take care of my diabetes because I want to see my grandchildren graduate") CENICE OF CLOCUIDE

DEDCICTERICE

of items away from accumulating a full set is a strong motivator to continue collecting)

Create milestones through achieving thresholds, such as hitting easy-toremember round numbers, levels, or setting deadlines (e.g. hitting a daily goal of 10,000 steps)

bored or giving up (e.g. games like Neko Atsume use unpredictability—which toys attract which cats? to keep users playing)

Provide opportunities for users to reset goals, to note progress and keep them relevant

Commitment

Create the conditions for users to decide on—and stick to—a plan of action

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- There are limited short-term consequences to inaction
- Users are half-hearted about their desire or ability to take action
- Users make decisions 'in the moment' that contradict personal goals
- "It just feels like there's no difference if I do it or don't do it..."

Keep Me Honest

The hardest part of effective long-term habit formation is, well, sticking to it. Stickk.com helps people stay committed to desired behavior changes by clearly tying financial stakes to time-bound, user-articulated contracts, with designated independent 'referees' monitoring progress (or lack thereof). Additionally, one can choose to have a 'cheering section' of other Stickk.com supporters, providing enough of an audience to keep the pressure on.

COMMITMENT—22

				_	
	MINDSET	PERCEIVED ABILITY	ACTION	SENSE OF CLOSURE	PERSISTENCE
If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:
You may want to	Introduce a 'contract' to help users articulate details of behaviors and goals (e.g. a joint agreement on explicit goals and expectations can help physicians and patients align on behaviors and follow-through) Have an objective or third-party participant select options or commit users to action	Limit or prevent user exposure to undesirable situations (e.g. don't go to Vegas if you have a gambling problem) Make commitment public to reduce the likelihood of backing down Give users a head start to increase their sense of ownership and progress toward results from the get-go	Set high or personally meaningful stakes—financial, social, or emotional—for failure and/or success (e.g. Stickk.com users can agree to donate money to a cause they abhor if they don't follow through on their stated commitment)	Allow users to set their own goals in advance, and actively recognize achievement	Remind users of social or personal promises they've made Provide encouragement and feedback to help users re-up flagging commitment

Accountability

Highlight promises made and positive peer pressure to sustain users' desire to see decisions through

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- · Users are struggling to change on their own
- An external force—whether a third party or even a written promise—will help keep a user on the straight and narrow to progress
- Actions that are coordinated and taken on a group scale will benefit everyone more than if taken as individuals
- There are limited short-term consequences to inaction

I Will If You Will

Social pressure can be a beast, as anyone who's been through junior high knows all too well. But when used in the right way, it can be a powerful lever to keep desired behaviors going strong. The food chain Pret á Manger plants seeds of accountability at a group scale to maintain store- and company-wide behaviors, from rewarding bonuses awarded for the performance of an entire team, to giving employees the power to vote on whether trainees—their potential new colleagues—get hired.

ACCOUNTABILITY—23

				ACCOUNTABILITY—23		
	MINDSET	PERCEIVED ABILITY	ACTION	SENSE OF CLOSURE	PERSISTENCE	
If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:	
You may want to	Link an individual's success to others (e.g. the team reaches a goal only if all individuals make the grade) Use a user's strong belief in their personal identity to encourage accountability (e.g. "I'm the kind of person who does what I say I'll do")	Make users "externalize" their intended path to progress by concretely describing actions	Use social pressure in a positive way, making users share goals with friends and/or family, or otherwise publicly declare commitments (e.g. encourage users to choose a personal 'referee' to keep them honest to their goals) Extract penalties or remove privileges for falling short	Ensure a sense of fairness and consistency of rules or structures (e.g. don't let some people slide while others are held accountable)	Enable users to monitor progress (e.g. FitBit's track steps over time to provide insight into physical activity) Make user actions transparent to increase visibility into follow-through (e.g. allow others to monitor or comment on user activity)	
			Remind users of promises made to others			

24—BARRIERS & ENABLERS

Control

Enable the user to control what they want (including delegating choice to someone else)

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- Users don't trust themselves or lack confidence to make the best decision
- Users might make detrimental decisions or engage in counter-productive behavior
- Putting control into others' hands will lead to more positive outcomes
- Users have more confidence in their ability than perhaps they should

Taking the Car Keys Away

While no amount of preparation can make the conversation easy, there are multiple caregiving web sites with content devoted to helping people discuss with elderly loved ones the safety concerns and potential benefits to handing over the car keys.

For many, driving represents control and autonomy, so resistance is understandable, but with many other difficult behaviors, people are often looking for ways to offload responsibility and effort while saving face.

PERSISTENCE

SENSE OF CLOSURE

If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:
You may want to	Remove the need to choose when it doesn't matter (e.g. use defaults to streamline processes when users don't need or want control over options) Use opt-out mechanisms to increase	Provide "do it for me" support when lack of user experience or confidence makes control a scary burden rather than a benefit Provide over-ride control when users are confident but may lack	Shield users from information that will prompt actions they've made clear they'd rather not take (e.g. don't allow users to check their 401k progress or shift their funds during volatile markets)	Provide transparency and feedback even when users have a reduced sense of control (e.g. it feels better to get bad news updates about flight delays than being kept completely in the dark)	Make choices irreversible to reduce user regret over paths not taken Help users see where control was valuable, and when it's worth giving up
	participation Automate actions when possible to eliminate need to choose	ability or judgment (e.g. robo-investor Betterment doesn't allow trading for the first and last 30 minutes of each day when markets are most	Introduce rules to enforce "good" behavior (e.g. PNC Bank's Virtual Wallet converts savings into checking accounts if users dip into their	Expand user ability—like "power user" controls or a DIY option—to provide more user control when they are ready for it	

savings too often)

ACTION

PERCEIVED ABILITY

volatile)

MINDSET

Small Barriers

Identify and design for 'minor' hurdles that have an outsized reduction on people's perceived ability to engage

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- Obstacles that seem almost inconsequential have an unusually high tendency to derail behaviors
- The success of a solution requires tasks that may seem objectively minor but are annoying to a user
- "I know it seems silly, but [I don't want to create yet another account]..."
- Users would benefit from a "speed bump" or moment of reflection before taking action

Don't Make Me Work For It

When products or services fail, it is often assumed that the central value of the concept didn't communicate with customers, or that market forces created an unfavorable environment. Some times, what's to blame is much smaller, possibly even seen as insignificant. For example, many people never use potentially valuable services simply because they require them to sign up and create a profile and a password. All it takes to derail an otherwise effective and thoughtful experience is just a little effort required at the wrong point in time.

PERSISTENCE

SENSE OF CLOSURE

If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:
You may want to	Craft tone and language to reinforce a user's desired identity and/ or don't emphasize negative attributes of identities (e.g. an 'earned income credit' is more palatable than a 'welfare credit') Recognize when "that's not for people like me"	Automate if possible to reduce barriers to action (e.g. Amazon Prime's One-click autofills necessary info) Make logistics (like amount of time or information inquired) clear and upfront	Avoid the perception of unnecessary effort, repetition, or cognitive overload Insert "positive friction" to introduce pauses and increase a user's awareness of their actions when reflection might be beneficial	Provide cues or next steps "just in time" or only when they are needed or useful	Reduce the need for users to make multiple actions or decisions, even if seemingly inconsequential (e.g. making people create a new user name and password just to access a website is often enough to keep them from signing up)

ACTION

PERCEIVED ABILITY

MINDSET

instincts may prevent engagement (e.g. people may feel they are not wealthy enough to need a financial advisor)

Behavioral Modeling

Tap into existing behaviors and habits to make things too easy not to do

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- · Users don't know how or when to use a new offering
- Users are hesitating to engage because they're afraid they'll "do it wrong"
- Users would benefit from clear signals about what type of response or action is expected of them

Now I Know What It's Good For

In the 90's, P&G spent millions to develop an odor eliminator called Febreze. Despite customer satisfaction with the product, P&G almost pulled it from shelves due to slow sales. Additional research indicated that adding perfume allowed them to position it as a 'finishing touch' to a clean home—consumers. familiar with the concept of spraying perfume or cologne to finish readying themselves for the day, now understood the concept, and Febreze sales finally took off. By 2012, Febreze accounted for over \$1 billion in annual sales18.

BEHAVIORAL MODELING—26

	MINDSET	PERCEIVED ABILITY	ACTION	SENSE OF CLOSURE	PERSISTENCE
If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:
You may want to	Disrupt 'business as usual' behavior by changing the context (e.g. just sitting in a different chair than usual can reduce habits like eating chips while watching TV)	Demonstrate or model desired actions to help users understand expectations (e.g. the first person to introduce themselves at a meeting implicitly indicates the "right" way to do it; the size of a fill-in box sets an expectation about how much text is appropriate to enter)	Embed new behaviors into existing behaviors (e.g. putting something by the door increases the chance that you'll remember to bring it with you on the way out) Graft new behaviors onto the beginning or end of existing ones (e.g. setting your yoga routine just before you shower)	Make behaviors related to beginnings and endings clear	Reinforce desired behavior by rewarding "good" examples

Ownership

Help people feel they 'own' outcomes to bolster their connection to options and decisions

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- There are opportunities to give users a greater sense of investment
- Users may benefit from 'seeing themselves' in an outcome
- Gaining buy-in is critical to a situation's success
- Users have a hard time dissociating themselves from—or seeing the actual value of—things they possess

Let Me Make It Mine

In a 2001 series of studies, researchers discovered that the mere act of constructing an item—such as IKEA products—increased the sense of value attributed to the object as if an expertly created item, with participants expecting others to share their opinions even when objectively those products showed imperfections¹⁹.

If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:
You may want to	Give a preview of benefits (e.g. offer access to a reduced set of features, or a full set for a limited time)	Use "try before you buy" offers to let users test a sense of ownership before committing	Provide a tailored just for me experience (e.g. Amazon prompts users with "customers who bought this item also	Deliver reminders of the value of ownership regularly, especially if it's time for renewal (e.g. hotel loyalty programs

PERCEIVED ABILITY

MINDSET

Recognize when the

"endowment effect"

causes users to over-

value something they

own (e.g. house-sellers

home's value hecause

they don't perceive the flaws or "features" that

may turn off non-biased

buvers)

frequently magnify their

Help users feel that they already own something to help them identify with it (e.g. provide a feeling of participation or investment to increase the sense of a head start or "skin in the game")

who bought this item also bought" based on their search and purchasing history)

ACTION

Provide non-financial rewards to encourage more immediate use (e.g. provide vouchers for a free dinner on Tuesday rather than a general gift certificate)

SENSE OF CLOSURE

indicate the level vou've

achieved—or aspire to—

and the services you will

get at each one)

PERSISTENCE

... need a reason to return, or will benefit from reflection:

Leverage "loss aversion" by raising the prospect of removing features or rescinding privileges to which users have become accustomed (e.g. people of the cusp of losing airline status fly "status runs" to accumulate just enough segments or miles to maintain their current *level for the next cycle)*

Whole Journey

Design experiences that make best use of beginning-middle-end expectations, sequencing and flow

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- · Current experiences feel disjointed or confusing
- Users would benefit from an overall arc that connects multiple disparate events

A Magical Experience

In 2008, Disney resolved to streamline the entire guest experience when visiting Disney amusement parks. Their solution came to be known as the 'Magic Band,' a radio transmitter embedded in a worn wristband. The bands arrive in the mail after booking tickets. Upon arrival to the park, guests can immediately gain access to and customize all aspects of their Disney experience, from transportation, lodging, dining, ticketing, to visiting the park's many attractions. When you are greeted by name wherever you go, it feels like magic.

WHOLE JOURNEY—28

PERSISTENCE

SENSE OF CLOSURE

time spent is the same)

If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:
You may want to	Use language, tone, and sequencing that reinforces (or disrupts, if you're looking to change specific behavior) users' expectations	Provide a sense of the overall arc with progress indicators that clearly communicate where a user is within the experience (e.g. being on step 15 of 23 causes less anxiety than being on step 7 of?) Segment experiences into meaningfully different phases to make them feel more manageable and achievable	Make the journey itself engaging and feel worthwhile (e.g. Chicago food chain Portillo's borrowed a page from Disney's book, making each stop along the drivethru route engaging)	Clearly indicate when the experience is ending or is over Provide a concrete sense of future next steps and when to expect them Help users feels like they are moving forward (e.g. it's more satisfying to walk 15 minutes each way to pick up lunch than wait 30 minutes standing in line, even if the duration of	Use novelty to keep users coming back or to mitigate the tendency to adapt, which can hasten boredom or disinterest (e.g. social platforms like Pinterest, Instagram and Twitter are grounded in their users replenishing and commenting on content to provide an ever-novel experience)

ACTION

PERCEIVED ABILITY

MINDSET

Key Moments

Create positive peaks to heighten the impact and 'stickiness' of memorable moments

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

 Opportunities to enhance specific interactions or points within an experience, creating memories that prime or reset user expectations for future experiences

Shopping on the Subway

Marketers long ago discovered the power of POP—'point of purchase'— displays, positioning impulse purchases near checkout lines where customers were captive in line until the next register freed up. The company Tesco upped the ante on converting this kind of 'dead time' into active behavior, providing Korean subway passengers with the ability to shop for groceries via a virtual store display while waiting for the next train to arrive... the best part being that the goods could be delivered while the commuter was still en route home.

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	MINDSEI	PERCEIVED ABILITY	ACTION	SENSE OF CLOSURE	PERSISTENCE
If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:
You may want to	Reduce the potential for negative moments (e.g. TSA's PreCheck system requires spending a little time and money upfront, but pays off big	Make use of user 'down time' to help them feel more positive about progress (e.g. Disney has excelled at entertaining people in endless lines	Make people feel special (e.g. introduce a sense of "just for me" to heighten high points) Encourage engagement	End experiences on a high note to increase the chance of overall experiences being regarded as positive	Provide meaningful artifacts that persist past the end of an experience (e.g. Ritz-Carlton once famously prepared a photo album

over escalators by 66%)

ACTION

DEDCENTED A DILLETT

en route to the big

for "winning" (e.g.

people's bad sense of

win is often enough to

heighten engagement)

probability means their

anticipation of a potential

Introduce the potential

attractions)

NAINIDOET

time by eliminating the

need to remove shoes.

computers, and liquids

while moving through

airport security)

heighten high points)

Encourage engagement by focusing on the fun factor (e.g. Fun Theory's Piano Staircase converted a subway staircase into a piano—with notes cued by stepping on stairs— and increased stair use

the chartee of overall past the end of an experience (e.g. Ritz-Carlton once famously prepared a photo album starring an accidentally left-behind stuffed animal giraffe having spa and hotel adventures, rather than simply returning the toy)

Leverage the "recency effect," in which events in the near past carry more weight

Feedback

Provide responsive and meaningful reinforcement for user actions

THIS MAY BE USEFUL WHEN YOU OBSERVE OR HEAR...

- Users are struggling to make sense of where they are in a process
- Users would benefit from confirmation that their action had the desired effect
- A user is likely to encounter a situation again, rather than just a one-off experience

Thanks, Coach

Like many in the wearable and quantified self space, Jawbone makes products that collect and present user data, like steps, minutes of activity, sleep quality, and heart rate. Through the Jawbone app, Smart Coach software takes this one step further by learning from users, recognizing patterns and interpreting meaning to provide actionable feedback to users in a timely manner. For example, after a 14-hour flight and a few glasses of wine, a user might be encouraged to drink more water.

PERSISTENCE

SENSE OF CLOSURE

through in-the-moment

confirmation (e.g.

to increase users'

confidence)

actively endorse that

a decision was smart

	MINDSET	I EIKCLIVED ADIEITT	ACTION	JENSE OF CEOSORE	TENSISTENCE
If users	seem confused about how to navigate options:	seem to feel hesitant about their ability to engage:	have trouble moving from thought to action:	crave signals of completion or a sense of satisfaction:	need a reason to return, or will benefit from reflection:
You may want to	Tie feedback to users' relevant identities, or to familiar mental models, to help them select more wisely	Demonstrate the type of feedback users will get upon making a choice in advance (e.g. don't let people's fears	Indicate how actions not taken would have benefited users, had they been taken (e.g. showing how much	Confirm that an action or message was received (e.g. provide a confirmation email upon receiving an online order)	Highlight results in relative, rather than absolute, terms (e.g. utility customers who were told their energy
	Direct users to advice	of seeming stupid be the reason to not try	money one might have save by signing up for a	Validate decisions	usage was better or worse compared to their

program)

Provide feedback

relative to a specific

can help to remind

working towards

users of what they're

'north star' goal, which

ACTION

PERCEIVED ARILITY

something new)

receive

Allow users to select

or specify the level of

feedback they want to

MINIDSET

from objective sources

recommendations from

or authorities (e.g.

Amazon, "people like

me" or reviews from

Consumer Reports can

increase users' confidence in their choice-making)

to confirm or coursecorrect behavior as quickly as possible

Tighten feedback loops

neighbors—rather than

specific numbers—were

more likely to maintain

energy-saving habits)

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