When given the choice between a surgery with a 10% mortality rate or a 90% arate, people are more likely to choose the 90% successrate.

#### **APPLICATION**

Frame costs to be included in other, larger costs, e.g., if someone is already paying for an \$80,000 car, suggest an add-on as opposed to a separate product.

Categorize products as "necessity," "basic," "splurge" to create differentiation.

Create categories for seemingly similar products such as infant spoon, toddler spoon, baby spoon.

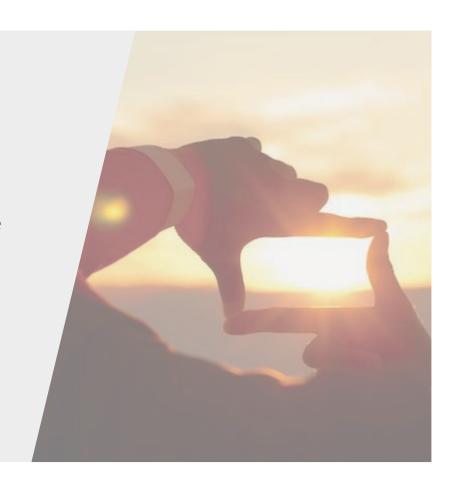


### RELATIVITY

#### **STORY**

Even if the savings are the same, people are more likely to drive out of their way to save \$5 on a \$15 calculator than to save \$5 on a \$125 jacket.

Source:Tversky, Amos, and Daniel Kahneman. 1981



People measure and account for the same thing (e.g. calories, income, tax rebates) in different ways depending on how they mentally categorize it.

### MENTAL ACCOUNTING

#### **APPLICATION**

Frame costs to be included in other, larger costs, e.g., if someone is already paying for an \$80,000 car, suggest an add-on as opposed to a separate product.

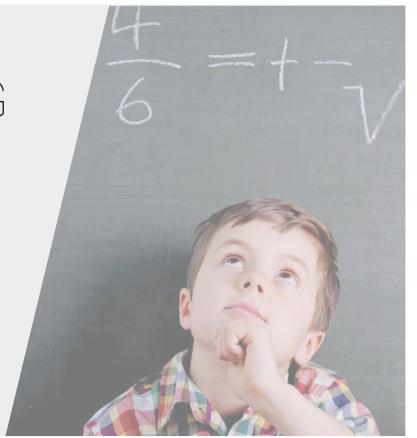
Categorize products as "necessity," "basic," "splurge" to create differentiation.

Create categories for seemingly similar products such as infant spoon, toddler spoon, baby spoon.

### MENTAL ACCOUNTING

#### **STORY**

Boston-area residents who received tax rebates in 2001 were given descriptions of their rebates as either "withheld income" or "bonus income." The residents who received "bonus income" reported spending 87% of their tax rebate while the residents who received "withheld income" reported spending, on average, only 25% of this money.



People become psychologically invested in costs that they have already incurred, regardless of what the current and future costs and benefits are.

#### **APPLICATION**

Get people to upgrade their products by offering buybacks for old items.
Combine product upgrades with other items or features so as to minimize the feeling of "replacement"

SUNK COSTS

### SUNK COSTS

#### **STORY**

If you're going to the movies and lose a \$10 bill on the way, you are more likely to purchase a \$10 movie ticket than if you'd lost your \$10 movie ticket and need to buy a new one.

Source: Tversky, Amos, and Daniel Kahneman 1981



People go with the default because it is the path of least resistance. In other words, going with the default does not require as much of an investment in decision making as going against the default does.



#### **APPLICATION**

Make the outcome that would most benefit the user the default.

Make it as difficult as possible for people to not do what you want.

Make directions and instructions as clear and easy to follow as possible – reduce uncertainty and ambiguity.

Have products pre-configured to start on the setting you want customers to use.

# DEFAULT

#### **STORY**

A luxury car company ran a study where people buying new cars were asked to choose options for their new car. They found that people who were asked more complex questions (versus those who were asked similar questions) early on, were more likely to choose the default options later.

Source: Levav, J., Heitmann, A., & Iyengar S. 2005



When faced with too much information or too many choices, people tend to either defer making a choice or go with a default choice, if one exists.

### CHOICE OVERLOAD

#### **APPLICATION**

Reduce choices as much as possible.

Have one or a few pre-packaged options.

Have the default setting satisfy as many people as possible.

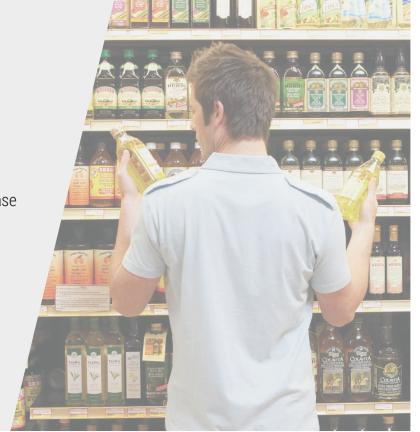
Frame choices to make them easier to understand: i.e. Student, Professional, etc.

### CHOICE OVERLOAD

#### **STORY**

Customers were six times more likely to purchase jams when only six choices were presented, as compared to twenty four choices.

Source: Iyengar, Sheena S., and Mark R. Lepper 2000



One individual, identifiable, victim who is known in great detail evokes a much deeper feelings, emotions and sympathy than a large group of anonymous individuals.

#### **APPLICATION**

Use tangible examples of peoples or stories to highlight the benefits of your product or service.

Highlight any similarities between your "victim" and the audience to heighten the effect.

### IDENTIFIABLE VICTIM



#### **STORY**

People donated more money when they saw the picture and name of an individual African boy under duress, than when they saw statistics on overall poverty in Africa.

Source: Small, Deborah A., George Loewenstein, and Paul Slovic 2007



In a choice between A and B, more people will choose option A when a slightly worse item than option A is included in the set.



#### **APPLICATION**

If you want someone to choose A over B, including an option which is very similar to A, but slightly worse, such as offers fewer features.

Try to make choices as obvious and easy to make as possible for users.



#### **STORY**

People intending to purchase a subscription to "The Economist" were presented with differing sets of choices. One group saw the choice between two very different options: a "\$59 Online Subscription" or a "\$125 Print & Online Subscription". The second group saw the same two choices with a third added: "\$125 Print-Only Subscription". Adding the third option, which was essentially a worse version of the Print & Online option, caused 52% more people to choose the more expensive Print & Online Subscription.

source: Ariely, Dan 2008

People are more likely to follow group norms, especially when they admire or relate to the group.



#### **APPLICATION**

Display a leader board, or a list of people who have made significant contribution – make it visual and public.

Inducing competition and displaying ranking systems can cause the reference point to shift to focusing on other people.

Describe desired behaviors as both common and valued in the community.

Highlight similarities between your user and the group that is exhibiting your desired behavior.



#### **STORY**

People are more likely to reuse their towels in hotels when presented with the message "join your fellow guests in helping to save the environment" versus "Help save the environment".

Source: Goldestin, Noa J., Robert B. Cialdini, and Vladas Griskevicius 2008



People value immediate rewards much more than they value future rewards. This means that immediate costs seem much more painful than future costs.

#### **APPLICATION**

Repackage costs so that benefits are immediate

Add additional "feel good" benefits upfront to incent action.

Use commitment mechanisms such as public goal setting.

### HYPERBOLIC DISCOUNTING



#### **STORY**

People would prefer a small piece of chocolate today versus a big piece of chocolate in a week. When given the choice between a small piece in one year, or a big piece in one year and a week, the outcome is inversed and people choose to wait for the bigger piece.

Source: Ariely, Dan 2008



People are more motivated by potential losses than by potential gains.

### LOSS AVERSION

#### **APPLICATION**

Frame value proposition as preventing a loss, rather than incurring a gain: "You are currently losing \$5 every month by not ...."

Show customers graphs with "money saved," "time saved," to highlight potential loss of not using your service.

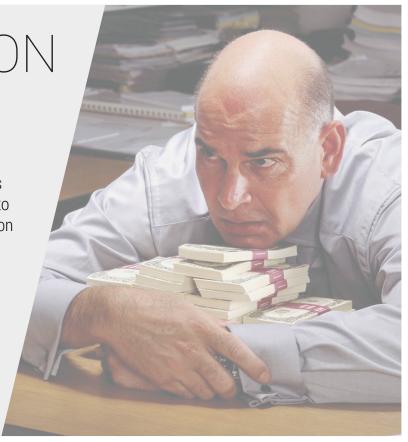
Give someone a reward then threaten to take it away for non-compliance, rather than rewarding them for compliance.

LOSS AVERSION

#### **STORY**

Some participants were given a coffee mug and asked the minimum they would sell it for. Others were asked the maximum they would be willing to pay for the same mug. While buyers were only (on average) willing to pay a maximum of \$2.87, Sellers (on average) were so averse to losing the same mug that they wouldn't accept less than \$7.12.

Source: Kahneman, Daniel, Jack L. Knetsch, and Richard H. Thaler 1991



Offering people a non-monetary gift (e.g. an object or experience) is more motivating than giving people a monetary gift equal to the cost of the gift.

## NON-MONETARY INCENTIVES

#### **APPLICATION**

Offer VIP memberships, early-access, special features, free gift bags etc.

Give personalized, thoughtful gifts that can't be quantified as easily.

Provide recognition and congratulate publicly when possible.

Try offering an in-kind gift, with a suggestion that people follow certain behaviours.

Try to build a sense of indebtedness by spending time, offering samples, doing a favor, etc. before asking for something.

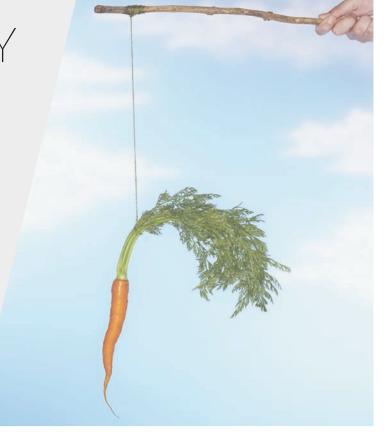
Don't wait too long to cash in on the goodwill you have built.



#### **STORY**

Students who were asked to catalog books from a library were either given a cash prize, a gift equivalent to the cash prize, or nothing (control). Compared to the control, students were 25% more productive when given a thermos worth \$7, but only 5% more productive when given a \$7 cash prize. The non-monetary incentive was 5x as motivating as the monetary incentive!

Source: Kube, Sebastian, Michel André Maréchal, and Clemens Puppea 2012



People are more likely to act in socially acceptable ways when they know their actions will be made known to others.

## STATUS & SELF IMAGE

#### **APPLICATION**

Display a leader board, or a list of people who have made significant contribution – make it visual and public.

Create smaller groups/networks where people contributions are made salient.

Have people publicly commit to their contribution upfront.

Make decisions based on committee vote to avoid someone opting out because they know it will be done anyway.

STATUS & SELF IMAGE

#### **STORY**

Citizens are 8% more likely to vote if they know their neighbors will be made aware of whether or not they do so.

Source: Gerber, Alan S., Donald P. Green, and Christopher W. Larimer 2008



If people are intrinsically motivated to perform a behavior, introducing a small, piece-rate monetary reward (extrinsic motivation) may actually decrease the behavior.

#### **APPLICATION**

Give personalized, thoughtful gifts that can't be quantified as easily.

Provide recognition and congratulate publicly when possible.

Try offering an in-kind gift, with a suggestion that people follow certain behaviors.

INTRINSIC VS. EXTRINSIC MOTIVATION

### INTRINSIC VS. EXTRINSIC MOTIVATION

#### **STORY**

Offering people \$7 to donate blood actually decreases blood donation.

Source: Mellström, Carl, and Magnus Johannesson. 2008



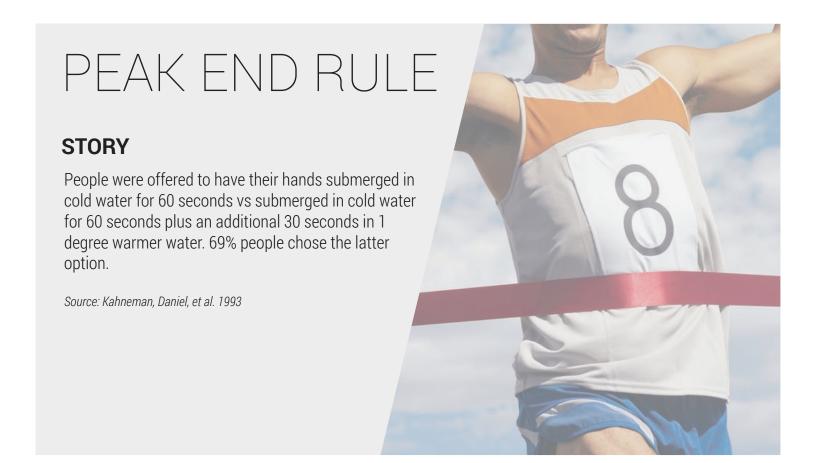
People judge and remember the most intense parts of any experience and the end, rather than the average or entirety of the experience.

### PEAK END RULE

#### **APPLICATION**

For users to remember a more positive experience overall, include key high points and a pleasurable end point.

Make sure the last part of the user experience is very pleasant/rewarding.



The closer a person is to achieving their goal, the more effort they will exert in an attempt to reach the goal.

#### **APPLICATION**

Use progress bars and encouraging feedback early on to make users feel like they are advancing well towards their goal.

When using progress bars, give users an early boost in order to encourage them to advance towards their goal at a faster rate.

### GOAL GRADIENT EFFECT



People often perform a cost/benefit analysis when making choices
(e.g., candy costs \$1 and will bring
me \$1.50 worth of enjoyment,
enjoyment, so I will buy it). Free goods
are seen as not only being cheaper
than the same good for a higher price,
but also as being even more
enjoyable/better/more rewarding (e.g.,
this candy bar costs \$0, and will bring me
\$2 worth of enjoyment).

THE POWER OF FREE

#### **APPLICATION**

Use free when your objective is to increase your userbase significantly.

Beware of using free for a product you will want to eventually charge for.

When offering free trials, always frame them as expiring, one-time, or scarce, while mentioning the standard price, so as not to dilute the value of your product

THE POWER OF FREE

#### **STORY**

In one trial of one study students were offered a Lindt Truffle for 26 cents and a Hershey's Kiss for 1 cent: 40% went with the truffle and 40% with the Kiss. When the price of both chocolates dropped by just 1 cent, suddenly 90% of participants opted for the free Kiss, even though the relative price between the two was the same. We concluded that FREE! is indeed a very powerful force.

Source: Shampanier, Kristina, Nina Mazar, and Dan Ariely 2007



People attach much more value to a product that they partially create than if that same product had been created for them, without them having to put in any effort.



#### **APPLICATION**

Offer your users a chance to customize your product early on in your user flow to engender a sense of ownership and significantly reduce conversion drop-off later in the order process.

Personalize your product with user information (name, birthday, last visit, etc.) whenever possible.



#### **STORY**

Some subjects were randomly assigned to assemble a plain black IKEA storage box. Others were given an assembled box and asked to inspect it. Participants were then asked to bid on the box to determine what they would be willing to pay for it. On average, those who had built their box were willing to pay 62.5% more it

Source: Norton, Mochon & Ariely 2012