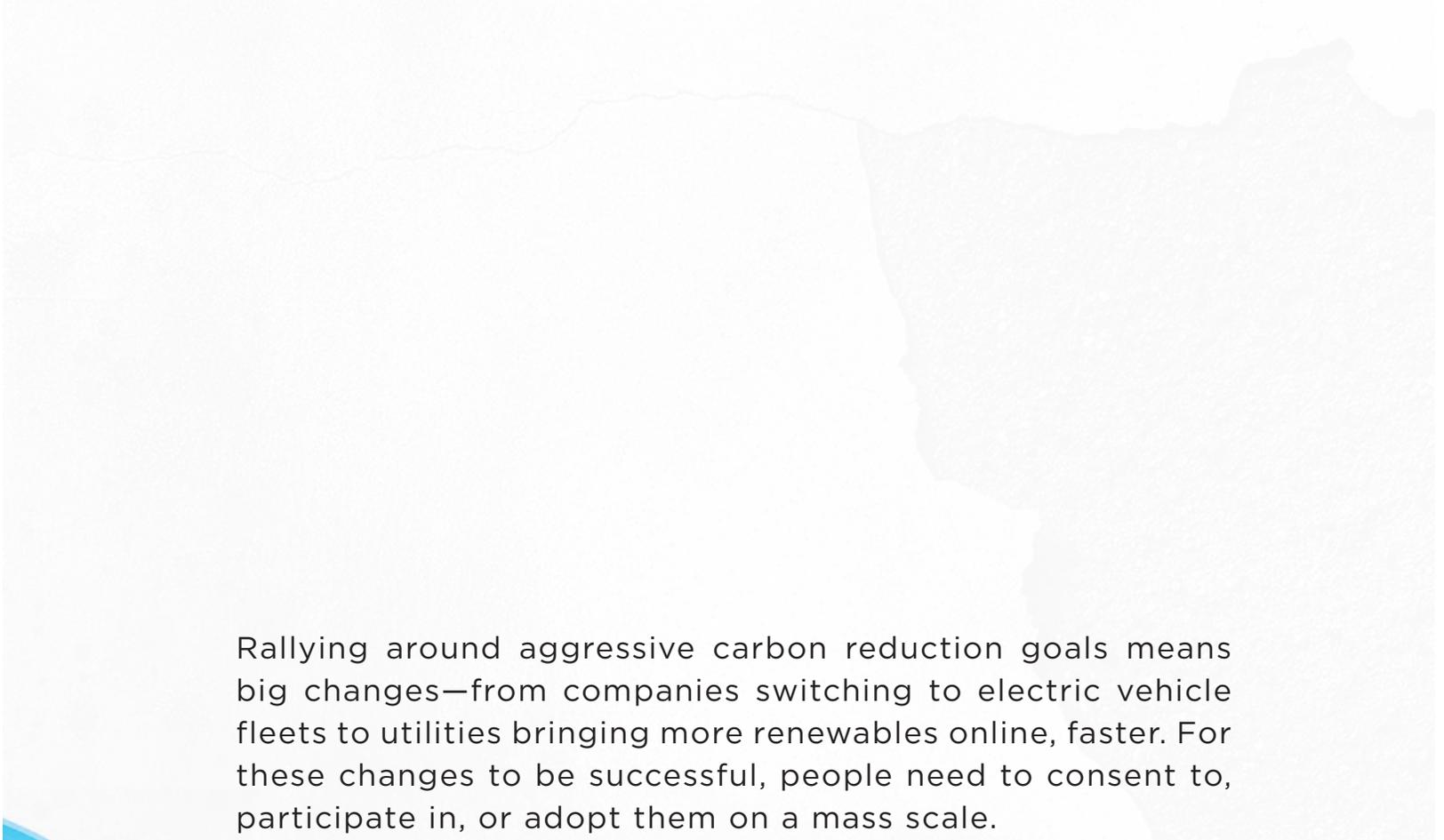


# CHANGE *is* HARD

Understanding How We  
Approach Decisions Can Help.





Rallying around aggressive carbon reduction goals means big changes—from companies switching to electric vehicle fleets to utilities bringing more renewables online, faster. For these changes to be successful, people need to consent to, participate in, or adopt them on a mass scale.



How do we make this happen when people avoid, and often strongly resist, change? What is the upside to replacing your trusted dial thermostat when the alternative is a complicated piece of digital equipment that even most of us in the industry have a hard time programming? Creating sexier, more compelling technologies cannot do it alone. To make sweeping change we need to work from the inside out, starting with a better understanding of ourselves.

We know that responding to the realities of climate change will require big changes. We also know that big changes and unfamiliar things often make us uncomfortable. Great design, while compelling, cannot overcome the greatest challenges we face in changing human behavior: (1) people tend to live their lives in largely unconscious patterns, and (2) they trust who (and what) they know. Even when we are convinced that change is needed, it is still difficult.

**Enter behavioral science!**





# People Tend to Live Their Lives in Largely Unconscious Patterns

There are many cognitive biases that impact people's willingness to adopt new technologies.<sup>1</sup> The following cluster of biases work together to make it particularly difficult.

## LOSS AVERSION

That feeling of finding \$20 in your winter coat the first time you wear it is pretty great. The feeling of searching for the \$20 bill you put in your pocket to pay for lunch is much worse than the pleasant surprise of finding one.

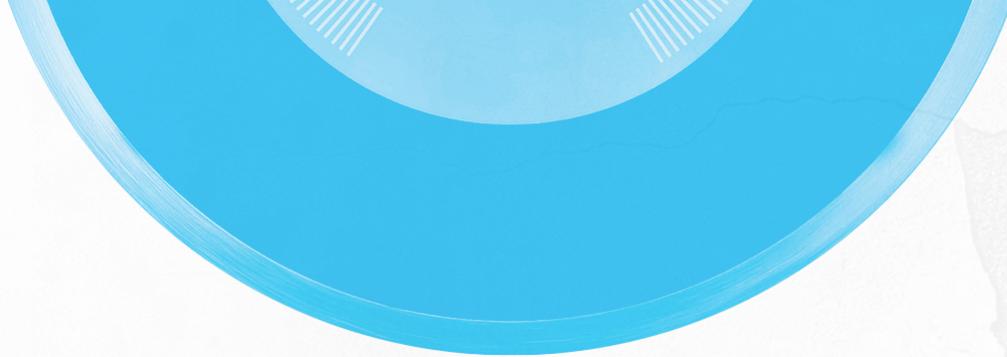
## STATUS QUO BIAS

When it comes to technology, the transitional costs of adapting to a new system, the effort to do so confidently, and the fact that customers have often adapted to suboptimal technologies through workarounds, make switching to a new technology a lower priority.

## THE ENDOWMENT EFFECT

When the famous decluttering guru, Marie Kondo, asks clients, "Does this bring you joy?" what she is really doing is testing what people value. People value objects that they possess more highly than the same object not in their possession. If someone values what is theirs, however irrationally, they are less likely to replace it even with alternatives that may better meet their needs.





# People Trust Who (and What) They Know: Why people rely on familiarity

Studies have shown that people tend to choose the more familiar option. Termed a “familiarity bias,” this phenomenon can be understood in the context of increased feelings of safety and security around a known option.<sup>2</sup>

A familiar option entails less risk and is cognitively less challenging because it requires a reduced mental load in decision making. Faced with a choice between something that is unfamiliar and something familiar, people will largely pick what is familiar.

Getting an influencer on board can pave the way for greater adoption. By contrast, if a community leader is skeptical of a new technology, this may hinder its adoption. Individuals look to those in their social networks to gauge their behavior and concept of norms. In effect, these cognitive biases extend not just to an individual but to their social network. For example, if a customer is going to stray from the status quo, they are more likely to do so along a pathway worn by others in their network.

ILLUME conducted a study of households that installed rooftop solar and found that the majority of people who installed it did so after someone else they knew—a neighbor or a relative—had installed it. Understanding who an individual views as their peers, competitors, advisors, and aspirational figures can clarify the range of considerations they may make and the technologies with which they may be familiar.

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# Change Is Hard: Why people choose the status quo

There are many cognitive biases at play that explain why people prefer the status quo.

Any work we can do to gain an understanding of the status quo will provide insights into what individuals and other market actors value about an incumbent technology. We can understand “value” at multiple points in customers’ journey with technology, including purchasing, installing, operating/using, and maintaining the existing equipment.

**Understanding how and why we value an incumbent technology is instrumental in understanding potential barriers to adopting new technologies. We need these insights to develop pathways and strategies to overcome barriers to new technology.**

## So, what can we do about our biases?

Answering a few questions through market research may point to challenges to broad market adoption or participation or, conversely, signal where there may be a good alignment, for instance, between a technology and a customer need. With these answers, program teams can develop strategies and approaches to lower the bar to participation by working with cognitive biases rather than against them. Given the urgency of the climate crisis, we need to use every advantage we can to encourage change.

### *To find out, ask:*

What are your customers currently doing/using? How are they solving this problem now?

What will a new technology or program/delivery design require of them?

How will that process be different from what they are currently doing?

Who is their network of trusted advisors? Can you get that network on board with the new technology/program or delivery design?

What about contractors or trade allies? What are they currently doing? How does the new technology or program/delivery design impact their day-to-day processes?

## The Psychology of Product Adoption

It is no surprise that the creators of products and services overvalue their offerings. But by how much? In “Eager Sellers and Stony Buyers: Understanding the Psychology of New-Product Adoption,” John Gourville draws on behavioral economics research to present the “9x” effect.<sup>3</sup> This is a phenomenon whereby developers of products and services value their service 9x more than the customer. John Gourville draws on behavioral economics research to present the “9x” effect. This is a phenomenon whereby developers of products and services value their service 9x more than the customer. Gourville derives this 9x effect by understanding the forces that lead customers to overvalue their current solution (by 3x) and product creators to overvalue what the new product brings (by 3x), thereby creating a gap between the value the product team sees and the value the customer sees in it.

By conducting research on how people make choices in the marketplace, behavioral economists have found that people (1) evaluate alternative technologies based on their subjective value rather than a rational cost-benefit analysis, (2) use their current (status quo) product as a baseline or reference point when evaluating an alternative technology, (3) compare their baseline with the new product and view improvements as gains, and shortcomings as losses, and (4) are more influenced by losses than gains (or “loss aversion”).

In the context of technology adoption, the implication of these cognitive biases is simple: **people may be attached to their current solution over a new technology, even if the new technology provides advantages in terms of efficiency, convenience, cost savings, or other benefits.** Gourville points out that innovators or product developers tend to exhibit the same cognitive bias as customers, albeit in favor of their product. In that case, the endowment effect and status quo bias may lead them to overvalue what their product offers to customers.

# How Can Our Industry Innovate When We Cling to the Familiar?

This year, ILLUME worked with a Midwest utility to conduct research on adoption of emerging technologies. Our research to understand the current landscape for this new technology included interviews with participants, non-participants, stakeholders, and market actors including contractors, distributors, and manufacturers. We also worked closely with key stakeholders on the client team to develop strategic interventions.

## Our Findings?

**Trust matters across the supply chain.** Customers rely on their contractor’s recommendations. Contractors and trade allies rely on their trusted brands, distributors, and manufacturers. Contractors wanted to be able to rely on a proven product so they didn’t risk a call back, and customers wanted a reliable solution so they could focus on what they cared about—building their businesses.

**Trusted messengers are pivotal to shaping markets.** Awareness of new technologies or rebates often flows from suppliers and distributors to the contractors who trust them. Working with these established channels of knowledge transfer and training may offer utilities a way to support broader integration and introduction of new technologies.

## Suggestions for further reading

Interested in learning more about cognitive biases?

We recommend these reads:

*Thinking in Bets* by Annie Duke (Penguin Random House)

*The Power of Habit* by Charles Duhigg (Random House)

*The Undoing Project* by Michael Lewis (W. Norton & Company)

*Sway: Unraveling Unconscious Bias* by Pragya Argawal (Bloomsbury Sigma)

*Blindspot: Hidden Biases of Good People* by Mahzarin Banaji (Random House)