THE DECISION SCIENCE SERIES

The Decision Sequence

Designing Engagement Strategies Based on How Consumers Decide.

Why Real Buyers and Bigfoot Never Match the Playbook



DS 01

Bounded Rationality and the Failure of Economic Man

–A Strategic Resource by Joe Worden | More @ www.jworden.com

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Foundations of Decision Science · Entry 01

Bounded Rationality and the Failure of "Economic Man"

Herbert Simon · Daniel Kahneman & Amos Tversky · Richard Thaler & Cass Sunstein

Questions this paper answers

- Why can giving prospects more information make choosing us harder?
- Why might a buyer stop comparing firms before finding the strongest option?
- What should prospects understand about us in the first thirty seconds?
- How can we make our firm easier to evaluate without removing the depth serious buyers need?

Definition. Bounded rationality is a simple idea with a long name. Real people decide inside limits: their information is incomplete, time runs out, attention wanders, and most of us can't run a full economic model in our heads while answering email. So we simplify. We stop when an option feels good enough to move forward. The textbook alternative is economic man, an imaginary decision maker who has every fact, never tires, and calculates the best answer every time. This entry explains why that model failed and what real buyers do instead.

The Twenty-Minute Benefit Expert

Every fall, companies quietly turn employees into "insurance experts" for, what, twenty minutes.

You know how it goes. The open-enrollment email lands, along with a benefits guide and a portal stuffed with premiums, deductibles, networks, prescription tiers, HSAs, FSAs, all the moving parts people understand just enough to accidentally make a mess.

Most folks click it between meetings. They scan a couple figures, try to recall how often anyone in the family saw a doctor last year, ping a coworker about what they're choosing, and half-believe there must be some perfect sweet spot between monthly premiums and out-of-pocket risk. Then they ask the one other non-expert in the house, usually a spouse, if either of them remembers what they picked last year, and the reason they picked it.

Twenty minutes later, after suspicion, creeping confusion, and a lot of distracted staring, they end up sticking with something close to what they already had. *HR records it as a choice*.

Technically, sure, it's a choice. It just has very little to do with careful evaluation. Time is short, the information is incomplete, and nobody wants to spend their afternoon doing mental gymnastics over deductibles. Life keeps moving.

So people simplify. They lean on the familiar. They settle on one that looks "fine," and submit.

Economists, though, spent decades building theories around a person who would treat this same moment in a completely different way.

They called him economic man.

Bigfoot and the Buyer Who Never Existed

As far back as I can remember, and I'm 60, economics has leaned on this character: the rational decision maker. He had all the facts. He patiently weighed the options, lined up his preferences, and chose the path that maximized his own benefit. Great for equations. Harder to find in the wild. But unlike bigfoot, who lived mostly in stories, economic man lived in textbooks.

The assumption was that real consumers behaved roughly like that imaginary buyer. Sometimes the forecasts worked, "sometimes" being a generous word (I'd argue closer to never). And when the errors leaned the same direction over and over, it became more than random noise.

In reality, people cut corners. They default to habit, pick up on a few cues, and stop looking long before the tidy process chart says they should. Those shortcuts end up deciding which firms make the next stage of consideration, which get dismissed, and which earn real attention.

Marketing plans designed for economic man, though? They keep piling on information and waiting for logic to do the rest. And, sadly, neither that buyer nor bigfoot ever arrives to make it work.

Busy People aren't Stupid. They Satisfice.

Herbert Simon looked at the rational-actor story from inside actual organizations, where deadlines exist, reports are partial, politics are real, and decisions can't sit around waiting for perfect data.

In Administrative Behavior (1947), Simon drew a line between economic man, who maximizes, and administrative man, who copes, and "copes" isn't code for "dumb." Administrative man can't see every outcome or weigh every possibility. So instead, he builds a workable mental picture of the situation and acts within that.

Later, Simon gave this habit a label: satisficing, part satisfy, part suffice. People set a "good enough" threshold, then stop once an option clears it. The search ends at the first acceptable answer, which can look nothing like the best answer sitting somewhere else.

He developed the idea in papers in 1955 and 1956, then spent the rest of his career showing what real decision-making looks like inside those limits. Worth adding, since it matters, he won the Nobel Prize in 1978.

Out of that work came bounded rationality: choices reflect both a person's limits and the pressure of the environment around them. Shift the time available, shuffle the order information appears in, change how much exploration is expected, and you often change the outcome.

Watch a company pick a vendor. The official story is almost always clean, "We reviewed the market, compared alternatives, and chose the strongest firm."

What actually happens in the room is usually rougher. Someone pulls a shortlist. One option looks credible, meets the internal checklist, and feels defensible if questioned. And right there, attention starts draining away. The remaining bids get a polite, ceremonial look, and the process wraps. Keep that in mind the next time you're deciding whether you want to be the third option, or the thirty-third.

A competent decision maker can be disciplined, rational, and still stop early. Busy people take shortcuts because choices have to fit inside everything else they're juggling.

Heuristics that Shape the Mistakes

Put one number on the table first and watch how it starts steering the entire conversation. Let someone read about one spectacular failure and suddenly that failure feels common, even if the data says it isn't.

Daniel Kahneman and Amos Tversky spent years showing how these errors repeat, reliably, under familiar conditions. Simon described the boundary. Kahneman and Tversky sketched the patterns inside it.

In their 1974 Science paper, they laid out the heuristics people use when they judge probability and value, including the ones we've just seen. Anchoring hands the first number an outsized role in what comes after. Availability gives vivid, easy-to-recall events more weight than their real frequency warrants. These mistakes show up with enough regularity that you can anticipate them.

Then came prospect theory (1979), which pushed the case further. People don't evaluate outcomes in a vacuum. They see gains and losses relative to a reference point. And once that reference point is set, losses of a given size hit harder than gains of the same size feel good. So the decision can shift simply because the reference point shifts, even if the underlying facts don't.

Prospect theory mattered because it wasn't just a list of exceptions to rational-choice theory. A few exceptions can be shrugged off. A replacement model demands a reply. Loss aversion, one of the best-known implications, gets its own entry later in this library.

Kahneman later carried these ideas to a much wider audience in Thinking, Fast and Slow (2011), where dual-process thinking reached the mainstream. He describes two modes of thinking: System One, fast and automatic, and System Two, slower and more deliberate. The first can shape what feels relevant and appealing before we make much deliberate effort to evaluate it. So detailed evaluation rarely begins on a blank slate. The buyer has already noticed, framed, favored, and dismissed more than they can later explain.

Also worth mentioning, Kahneman received the Nobel Prize in 2002. Tversky died in 1996 and almost certainly would have shared it.

Choice Architecture: If People Simplify, the Circumstance Decides

Set a default and a lot of people stick with it.

That simple observation sits near the center of Nudge (2008), by Richard Thaler and Cass Sunstein. They called it choice architecture: the order of options, the default setting, and the way information is presented can, and does, steer decision making.

The retirement-plan example makes it obvious. Automatically enroll employees, let them opt out if they want, and participation rises. Same employees, same plan, different setup, different result.

Neutral presentation sounds noble, but like bigfoot, it's mostly fictional. Someone always decides what appears first, which option is easiest, how much effort the alternatives require, and what happens if a person does nothing.

In Misbehaving (2015), Thaler carried the rationality argument into mainstream economics. His Econs behave like textbook maximizers. Humans show up with limited attention, sensitivity to loss, and a surprising willingness to accept whatever boxes are already checked.

And since we're keeping the credit straight, Thaler won the Nobel Prize in 2017, largely for bringing these departures into economics and showing how they shape markets and policy.

The distinction I make in this work is between arranging the choice and understanding what makes commitment acceptable. Choice architecture arranges the menu. Decision Architecture asks what makes the diner willing to order.

Nudge concentrates on the environment around a choice. Decision Architecture follows the internal movement from need and uncertainty toward enough confidence to commit. Related questions, with this work concentrating on the movement toward commitment.

Today's Battle: Limited Attention Makes Trust More Valuable

Decision Architecture starts with the same irritating truth running through all this work: buyers can't process everything we want to tell them.

Then it asks the practical question. What has to happen before someone, with incomplete information, limited attention, and personal exposure, will pay attention, engage, and commit?

Bounded rationality explains why more information can create more friction. Every added claim asks the buyer to interpret it, compare it, judge the source, and decide whether it changes anything. Eventually, the marketing we ship stops reducing uncertainty and starts piling on work.

Satisficing explains why firms vanish from consideration before they even know they were in the race. A buyer builds a manageable field, finds an option that clears the "good enough" bar, and moves on. The options that might be better don't matter much if they never get evaluated.

It's a close cousin to the law of diminishing returns. Information can clarify the choice. After a point, extra content starts to blur it, competing with the buyer's ability to sort what's already in front of them. Decision Architecture treats that friction as part of the decision, instead of blaming the buyer for not reading every page.

Like bigfoot wandering the Pacific Northwest, economic man still lurks inside a lot of professional-services marketing, and I see it all the time. Firms offer credentials, proof, thought leadership, detailed explanations, then expect the buyer to turn that pile of information into the next step. What they're really doing is handing a limited mind more homework and calling it persuasion.

AI makes the problem sharper. Insights, summaries, and polished claims are coming in floods. Information grows, attention doesn't.

So trust has to do more of the heavy lifting. Trust lets a buyer feel confident enough in a source, an interpretation, or a person to stop checking every available fact. Commitment becomes possible without full certainty, partly because full certainty was never on offer.

All this research helps define the decision problem underneath a lot of traditional marketing. Decision Architecture moves one step further and asks how relevance, interpretation, confidence, and trust tend to develop, in order, around a consequential choice.

Even when every answer is available, the buyer still needs a reason to believe one of them.

The Marketing Read

Buyers don’t always keep searching for the best option. An acceptable one can end the search. Build your marketing plan around that possibility, and you’ll stop assuming every buyer is going to give you a full hearing.

It's also the quiet problem with most personas. They describe how your buyer would decide with unlimited time, attention, and patience... which is a buyer nobody has ever met. The persona reads everything, weighs everything, and picks the best option. The human it's supposed to represent skims, satisfices, and picks the first acceptable one. Market to the second person, because the first one isn't real.

Because here's the problem in real life: buyers stop searching before you even realize you were on their radar. Assume, as a baseline, that anything you publish gets skimmed, not studied, and it's happening while they're juggling other tabs, other vendors, other tasks. Each extra point you add doesn't just "add value", it adds work. They have to make sense of it, stack it against alternatives, decide if you're credible, then figure out whether it changes their decision at all. After a while, you're not competing with other companies, you're wrestling with your own overflow.

Which chair you sit in decides your play. If you're the established name, satisficing is your moat: you're already the easy yes, the option that clears the bar without homework, and your only job is to stay effortless to choose. If you're the firm nobody knows yet, the moat runs the other way, and your one opening is to be understood faster than the incumbent can be remembered.

Either way, start by locating the "good enough" threshold in your category, the handful of signals someone needs to see before you're considered a viable option. Then put those signals at the top of the path, where they hit first. Not buried. First. Because a buyer who finds an acceptable answer may stop looking, and your exhaustive explanation does nothing if they never reach it.

Put the credentials and evidence that establish viability up front. Save the full depth for the buyer who chooses to slow down and take a closer look, and make it easy to reach. The first thirty seconds should earn that examination, not attempt to contain it.

What you don't want to do is crank out more content aimed at a decision that's already closing in. When a firm feels itself losing ground, the reflex is to send one more deck, one more doc, one more explainer. That's exactly when "more" turns into drag.

The one decision you can't hand off is what belongs in the first thirty seconds. That's positioning, and no amount of output or production muscle can replace getting that call right.

Here's the tough part: if your marketing only works when someone evaluates you thoroughly, you've already lost the people who dropped out quietly and never reached out. Build for the person who might exit early, because you won't get a chance to explain what they missed.

Primary Sources

- Herbert A. Simon, Administrative Behavior: A Study of Decision-Making Processes in Administrative Organization. Macmillan, 1947.
- Herbert A. Simon, "A Behavioral Model of Rational Choice." Quarterly Journal of Economics, vol. 69, 1955, pp. 99–118.
- Herbert A. Simon, "Rational Choice and the Structure of the Environment." Psychological Review, vol. 63, 1956, pp. 129–138.
- Amos Tversky & Daniel Kahneman, "Judgment under Uncertainty: Heuristics and Biases." Science, vol. 185, 1974, pp. 1124–1131.
- Daniel Kahneman & Amos Tversky, "Prospect Theory: An Analysis of Decision under Risk." Econometrica, vol. 47, 1979, pp. 263–291.
- Daniel Kahneman, Thinking, Fast and Slow. Farrar, Straus and Giroux, 2011.
- Richard H. Thaler & Cass R. Sunstein, Nudge: Improving Decisions About Health, Wealth, and Happiness. Yale University Press, 2008.
- Richard H. Thaler, Misbehaving: The Making of Behavioral Economics. W. W. Norton, 2015.