

Designing Products That Fit Real Human Behavior

Executive insight

The central mistake in product design is to treat **value** as if it automatically produces **behavior**.

A product may solve a genuine problem, be well designed, reasonably priced, and enthusiastically received—and still fail. The customer must do much more than recognize its value. They may have to notice it, understand it, trust it, choose it, pay for it, learn it, remember it, interrupt another activity, return repeatedly, and continue doing so long enough for the promised value to appear.

Each of those actions has a cost.

The most useful way to think about adoption is therefore not:

“Is this product valuable?”

It is:

“Is the value large, immediate, credible, and frequent enough to overcome the full behavioral cost of using it—in the customer’s actual life, against everything else competing for that life?”

Research on technology adoption consistently finds that perceived usefulness matters, but so do perceived effort, social conditions, facilitating infrastructure, and the user’s ability and opportunity to act. Behavioral science likewise shows that intentions often fail to become actions, that people disproportionately preserve the status quo, and that repeated behaviors are strongly shaped by stable cues and contexts. ¹

This leads to the report’s central conclusion:

Successful products do not merely create value. They create value in a form that can realistically earn a place in the customer’s routines, attention, memory, channels, budget, and identity.

That does not mean people never change. They change dramatically when the conditions are right. Smartphones, e-commerce, streaming, remote work, podcasts, audiobooks, social platforms, and mobile banking all altered behavior at enormous scale. But many apparent “new behaviors” were actually easier, faster, cheaper, more portable, more social, or more convenient versions of things people already wanted to do.

A smartphone did not have to invent the desire to communicate, take photographs, listen to music, find directions, shop, read news, or relieve boredom. It consolidated those motives into a device people carried everywhere. Smartphone ownership among U.S. adults rose from 35% in 2011 to 91% in 2025, illustrating

what can happen when one product captures numerous existing behaviors and becomes the infrastructure through which they occur. 2

The practical implication for entrepreneurs, chambers, associations, authors, service providers, and software builders is candid but constructive:

Do not ask only whether customers need the outcome. Audit the behavior required to obtain it.

A weak product says:

“Customers should remember to come to us.”

A behaviorally fitted product says:

“We will appear where the customer already is, at the moment the need arises, with the fewest possible steps between recognition and value.”

A useful conceptual equation is:

Behavioral value surplus = immediate reward + avoided loss + social or identity value + credible future benefit –

This is not presented as a validated psychological scale. It is a practical design discipline. A recurring product must generate a positive behavioral value surplus not merely during the sales presentation, but repeatedly, in the moments when the customer decides whether to use it.

What the evidence says

Creating recurring behavior is difficult because purchase, trial, activation, repetition, habit, retention, and profitability are different outcomes.

A customer can like an idea without buying it, buy without using it, use without receiving value, receive value without returning, return without forming a habit, and form a habit without becoming economically valuable. Treating those stages as interchangeable is one of the most damaging errors in product forecasting.

The intention-behavior gap is well documented across consumer, health, environmental, and organizational settings. People can sincerely express a preference or intention and still fail to act when the real decision presents time pressure, inconvenience, competing priorities, uncertainty, or an established alternative. 3

Value must be available at the moment of action

A product's abstract benefits may be substantial, but human decisions are often made under immediate conditions. At the moment of use, the customer feels the login problem, the interruption, the uncertain password, the five-minute setup, the data-entry requirement, or the availability of an easier substitute. A benefit promised next month competes poorly with friction experienced now.

The Technology Acceptance Model identified perceived usefulness and perceived ease of use as important determinants of technology acceptance, with usefulness often exerting the stronger effect. Later models such as UTAUT added social influence and facilitating conditions, reinforcing the point that a useful tool can still fail when users lack the supporting environment, confidence, access, or workflow fit required to use it.

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The COM-B framework expresses a similar principle more broadly: behavior requires sufficient **capability**, **opportunity**, and **motivation**. Motivation alone cannot overcome a product that arrives in the wrong channel, demands unavailable time, requires unfamiliar skills, or conflicts with organizational systems.

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Behavioral fit is different from problem-solution fit

These related forms of fit should be separated:

Form of fit	Central question
Problem-solution fit	Does the offering address a real and meaningful problem?
Product-market fit	Does a sufficiently large market choose, use, retain, and pay for the offering?
Product-channel fit	Can the offering be discovered, sold, delivered, and supported through channels whose economics and behaviors make sense?
Product-routine fit	Does use occur naturally within a recurring context, sequence, or existing habit?
Behavioral fit	Can customers realistically perform the complete sequence of actions required for the product to create value and sustain its business model?

Behavioral fit can therefore be defined as:

The degree to which a product's required actions, cues, channels, frequency, effort, rewards, and risks align with the customer's capabilities, opportunities, motivations, and existing routines closely enough to produce sustained and economically viable use.

A product can have problem-solution fit and still lack behavioral fit. A chamber app, for example, may contain useful events, discounts, news, and directories. The failure point may not be content quality. It may be the assumption that an ordinary member will download another app, preserve the login, allow notifications, remember the app between infrequent needs, and choose it over email, Google, LinkedIn, or a direct message.

Behavior capture usually has an advantage over behavior creation

Behavior creation asks customers to establish a new destination, routine, system, or allocation of time. Behavior capture places the product inside something they already do.

Behavior-creation design	Behavior-capture alternative
Visit a new dashboard	Put the insight in the CRM, inbox, Teams, or Slack
Remember a loyalty number	Connect loyalty automatically to payment or phone number
Enter data into a second system	Reuse data already entered elsewhere
Open a chamber app	Send a useful, personalized email or calendar prompt
Join a new online community	Bring selected discussions into an existing channel
Remember to review progress	Deliver the progress report at a predictable trigger
Search a portal for a document	Link directly to the relevant document from the workflow
Create a new reading period	Offer audio that fits commuting, walking, or household tasks

This advantage is partly explained by status quo bias: people show a disproportionate tendency to remain with an existing option, particularly when alternatives are numerous or decisions are complex. It is also explained by habit research showing that repeated actions become linked to stable contexts and cues. ⁶

Behavior capture is not automatically superior. A new behavior can be justified when the product provides unusually high value, solves a frequent or urgent problem, creates an immediate reward, benefits from network participation, is reinforced by regulation or organizational policy, or becomes the easiest gateway to a larger set of valued activities.

The burden of proof, however, should be higher when a product requires customers to create a destination habit from nothing.

Recurring behavior requires more than satisfaction

Habit research does not support a universal claim that a behavior becomes automatic in 21 days—or any other fixed period. Formation times vary substantially by behavior, person, context, and consistency. Repetition in a stable context matters, and missing an occasional opportunity is not necessarily fatal, but many behaviors require weeks or months before becoming relatively automatic. ⁷

Recurring products are more likely to survive when several mechanisms reinforce one another:

Mechanism	Why it matters
Frequent need	Creates repeated natural opportunities for use
Stable trigger	Reduces dependence on unaided memory
Immediate reward	Gives the user a reason to complete today's action
Visible progress	Makes delayed benefits psychologically present
Low session cost	Allows use even when time or energy is limited

Mechanism	Why it matters
Personalization	Raises relevance and reduces search effort
Social reinforcement	Adds accountability, belonging, competition, or coordination
Identity	Turns use into evidence of “the kind of person I am”
Consequence of non-use	Makes omission more salient
Accumulated investment	Increases the cost of switching away
Automation	Removes the need for deliberate action
Variable content or novelty	Prevents a recurring experience from becoming stale

Implementation intentions—plans that connect a specific cue to a specific action, such as “When I finish lunch, I will complete the lesson”—can help convert intention into action. Their effectiveness varies by context and outcome, however, and they do not rescue a product whose basic reward is weak or whose burden remains excessive. ⁸

Attention is the wider competitive market

The true competitor is not simply the company selling a similar product.

A chamber publication competes with the member’s email backlog. A novel competes with television, podcasts, family responsibilities, sleep, and the reader’s favorite established author. A business dashboard competes with the employee’s CRM, meetings, urgent client work, and the possibility of ignoring the data. A wellness app competes with every other action that can occupy the same five minutes.

U.S. consumers spend roughly six hours a day with media and entertainment, but Deloitte’s 2025 research argues that this total is not expanding much; services are increasingly competing for a relatively fixed pool of time and spending. McKinsey likewise found that relevance and perceived quality matter more than simply maximizing exposure time. ⁹

The builder should therefore identify the product’s **behavioral territory**:

- Which minutes must it obtain?
- Which screen or channel must it occupy?
- Which familiar action must it replace, interrupt, complement, or follow?
- Which other purchase loses budget when this purchase wins?
- Which reminder or notification will it displace?
- What does the customer currently do when the problem occurs?

The last question is especially important. “Nothing” is still a competitor. Customers often tolerate a problem rather than adopt a solution whose behavioral cost exceeds the cost of continued inconvenience.

Price changes the decision, not just the budget

Behavioral economics shows that people do not always treat money as perfectly interchangeable. Mental accounting can lead consumers to classify and evaluate expenditures in separate psychological accounts rather than integrating them into a single rational calculation. 10

The pain of paying also depends on how closely payment is coupled to consumption. Immediate, visible payment can make consumption feel more costly; credit, subscriptions, bundles, and flat-rate pricing can weaken that coupling. Consumers may sometimes prefer flat-rate plans even when usage-based pricing would cost less because the flat rate reduces the repeated psychological cost of deciding and paying. 11

This helps explain why five \$4 decisions can behave differently from one \$20 decision, although no universal rule says the smaller purchases will always win. The \$4 item may:

- fall beneath an informal deliberation threshold;
- feel reversible or inconsequential;
- be charged to a different mental account;
- create less anticipated regret;
- require less comparison;
- produce an immediate novelty reward;
- or be purchased at five separate high-motivation moments.

The \$20 purchase may trigger research, postponement, comparison, household-budget considerations, or concern about whether the product will actually be used.

But lower purchase friction does not prove stronger adoption. Cheap apps, discounted courses, impulse ebooks, and free trials can produce many transactions while generating few activated or retained users. A low price may remove the purchase decision while leaving the behavioral burden untouched.

Builder enthusiasm systematically distorts adoption estimates

Creators know the product’s origin, logic, intended use, terminology, and future potential. Customers do not. The curse of knowledge describes the difficulty better-informed people have in reproducing the perspective of those who lack their information. 12

Builders may also value what they helped create more highly because of the IKEA effect, under which labor invested in successful creation can increase perceived value. Planning-fallacy research further shows why teams underestimate the time, complexity, and obstacles involved in execution. 13

This creates several recurring errors:

Builder interpretation	More useful alternative hypothesis
“Customers do not understand the value.”	The value may not be visible quickly enough.

Builder interpretation	More useful alternative hypothesis
"People are resistant to change."	The proposed replacement may be worse than the current routine.
"We need more education."	The product may require too much explanation.
"Members are too busy."	The product may not be valuable enough to displace what occupies their time.
"The app needs more features."	More features may increase learning and navigation burdens.
"The board loved it."	The board may be unusually informed, committed, and socially invested.
"People said they would use it."	Stated intention was measured without real cost or competing demands.
"Downloads prove demand."	Downloads measure acquisition, not activation or retention.
"We need stronger reminders."	Reminders may increase annoyance without increasing underlying value.

Early adopters are also rarely representative of the broader market. They can be more technically confident, curious, tolerant of defects, motivated by novelty, or ideologically committed. Research on diffusion repeatedly finds meaningful differences between early and later adopters; studies of technologies such as residential solar have found early adoption driven more strongly by technological and environmental enthusiasm, while later adoption may depend more heavily on practical economics. ¹⁴

Positive feedback from insiders should therefore be treated as evidence that **insiders like the idea**, not proof that ordinary customers will sustain the behavior.

The Behavioral Fit Framework

The following framework is a practical synthesis rather than a validated academic diagnostic. It is designed to force explicit assumptions before substantial investment.

Score each factor from **zero to four**:

Score	Meaning
0	Hostile condition or no evidence
1	Weak assumption supported mainly by opinion
2	Plausible but unproven
3	Strong evidence from realistic tests
4	Behavior already observed repeatedly in the target market

Factors marked **critical** should receive double weight. A high overall average should not conceal a zero on a critical factor.

Factor	Definition	Practical test	Critical?
Existing behavior	The degree to which the offering attaches to or replaces something customers already do	Observe what customers currently do when the problem appears	Yes
Need frequency	How often the underlying need occurs	Use diaries, transaction records, search data, or workflow observation	Yes
Urgency	How quickly the customer feels pressure to act	Ask what happens if action is delayed by a day, week, or month	No
Consequence of non-use	The financial, emotional, social, or operational result of ignoring the product	Identify whether omission has a visible cost	No
Motivation	Strength of the customer's desire for the outcome	Require a real sacrifice in the test: money, time, data, or calendar commitment	Yes
Immediate reward	Value experienced during or immediately after use	Time the distance from first action to first meaningful benefit	Yes
Long-term reward	Accumulated benefit from continued use	Determine whether progress is visible before the final outcome	No
Monetary burden	Price plus perceived financial risk	Test real prices rather than asking what seems affordable	Yes
Time burden	Minutes required to start and continue	Time users under realistic conditions	Yes
Attention burden	Degree of concentration and interruption required	Observe whether use survives busy and distracted conditions	Yes
Learning burden	Knowledge or skill needed before competent use	Give the product to an unbriefed target user	No
Switching burden	Difficulty of leaving the current tool, habit, vendor, or process	Inventory migration, retraining, coordination, and contractual costs	Yes
Memory dependence	How much use relies on the customer remembering independently	Remove reminders and observe whether behavior occurs naturally	No

Factor	Definition	Practical test	Critical?
Trigger quality	Reliability and timing of cues	Identify the exact event that prompts use	Yes
Discoverability	Likelihood the product is found when the need occurs	Search using the words a customer would use, not the builder's terminology	No
Channel fit	Alignment with channels customers already monitor	Compare email, search, SMS, social, app, portal, and workflow delivery	Yes
Workflow integration	Extent to which value appears inside existing systems	Prototype the experience in the customer's CRM, calendar, payment flow, or inbox	Yes
Trust	Confidence in the provider, claims, data practices, and reliability	Test objections with unfamiliar prospects rather than existing supporters	Yes
Alternative attractiveness	Strength of direct competitors, workarounds, inaction, and familiar habits	Ask what the customer would do without the product	Yes
Social influence	Effect of peers, norms, coordination, belonging, or visibility	Test whether use grows when a real group participates together	No
Network effects	Whether the product becomes more useful as participation grows	Calculate the minimum participation needed before value appears	No
Automation	Portion of value delivered without repeated customer action	Identify every step that can be eliminated or precompleted	No
Evidence quality	Reliability of the adoption evidence	Rank evidence from opinions to observed, paid, repeated behavior	Yes
Economic viability	Whether realistic adoption and retention support the business model	Run cohort, margin, CAC, support, and sensitivity calculations	Yes

A simple score can be calculated as:

$$\text{Behavioral Fit Score} = \frac{\sum(\text{factor score} \times \text{weight})}{4 \times \sum(\text{weights})} \times 100$$

Use a weight of two for critical factors and one for the others. Suggested interpretation:

Score	Interpretation
75–100	Strong candidate for a controlled launch, provided no critical factor scores zero
55–74	Proceed only with targeted redesign and behavioral testing
35–54	The concept requires deliberate behavior creation, unusually high value, or a different model
Below 35	Do not build at scale without changing the premise

These thresholds are decision heuristics, not universal scientific cutoffs. They should be calibrated against the organization's own historical conversion and retention data.

A second calculation is useful: the **Behavioral Burden Index**. For each required customer action, score the following from zero to four:

- time;
- cognitive effort;
- learning;
- switching;
- trust or perceived risk;
- memory dependence.

A step can therefore score from zero to 24. Any step scoring 15 or more should be treated as a serious abandonment point. More importantly, the team should ask whether that step can be eliminated rather than merely explained.

The framework exposes an important distinction:

Marketing can improve awareness, comprehension, expectation, and trust. It cannot permanently compensate for a use experience whose burden exceeds its reward.

Marketing is more likely to be the main constraint when qualified people who encounter the product activate, receive value, retain, and recommend at healthy rates—but too few suitable people know it exists.

Redesign is more likely to be the answer when awareness and trial are respectable but customers fail during onboarding, do not reach first value, abandon the product after a few uses, require repeated support, or revert to familiar alternatives.

The Behavioral Burden Audit and Existing-Life Test

The audit should describe what customers must actually do—not what the builder hopes they will do.

For every stage, record the required action, elapsed time, decisions, information needed, likely anxiety, competing behavior, abandonment rate, and evidence source.

Stage	Customer must...	Common abandonment points	Evidence to collect
Hear	Encounter the product	Wrong channel, low salience, competing messages	Reach and qualified awareness
Understand	Grasp what it is and why it matters	Jargon, category confusion, excessive explanation	Unprompted comprehension tests
Believe	Trust the claim and provider	Skepticism, unclear proof, privacy concerns	Objections and credibility ratings
Recognize relevance	Connect the product to a current need	Problem feels infrequent or nonurgent	Trigger interviews and diary studies
Decide	Choose action over postponement or alternatives	Too many options, uncertainty, status quo	Decision time and abandonment
Pay or commit	Exchange money, data, access, or time	Price pain, perceived risk, procurement	Real conversion at tested prices
Access	Download, visit, install, or locate	Device space, app-store friction, link loss	Start-to-access completion
Register	Create credentials and grant permissions	Forms, passwords, verification, permissions	Field-level funnel analytics
Use correctly	Complete the first meaningful action	Confusing interface, missing data, skill gaps	Task-completion observation
Receive value	Experience the promised benefit	Value delayed, weak, invisible, or ambiguous	Time-to-first-value
Remember	Recall the product at the next relevant moment	No natural cue, notification overload	Unaided return rate
Return	Repeat the behavior	Novelty disappears, old routine resumes	Cohort retention and frequency
Continue	Maintain use through ordinary life disruptions	Vacations, workload, fatigue, changed priorities	Longer-term cohort survival
Renew or recommend	Continue paying or advocate publicly	Weak accumulated value, switching, embarrassment	Renewal, expansion, referral, margin

The audit should not stop at interface clicks. It must include the behavior before and after the product.

For example, an employee dashboard may be technically easy to use. But the full sequence may be:

1. Remember the dashboard exists.

2. Stop working in the CRM.
3. Locate the bookmark.
4. Authenticate.
5. Find the correct report.
6. Interpret an unfamiliar metric.
7. Decide what action it implies.
8. Return to the CRM.
9. Perform the action.
10. Repeat next week.

The more behaviorally fitted alternative may be to put one actionable insight, with a direct link or preconfigured action, inside the CRM record the employee is already using.

The Existing-Life Test

Before approving a product, the builder should map one ordinary day in the target customer's life and answer these questions with observable detail:

Question	What a strong answer looks like
Where does the product enter the customer's day?	"Immediately after the customer completes payroll on Friday," not "whenever they have time."
What happens immediately before use?	A specific event, action, location, message, or emotional state
What happens immediately after use?	A clear reward, completed task, saved step, social response, or next action
What existing behavior does it replace?	A current report, search, phone call, spreadsheet, purchase, or media choice
What does it complement?	An existing meeting, commute, transaction, workout, meal, or workflow
What time must the customer surrender?	A measured number of minutes and the activity displaced
What attention must be surrendered?	Whether use can occur while multitasking or requires concentration
What reminds the customer?	A natural event, environmental cue, person, calendar event, or system trigger
What happens if the customer ignores it?	A visible loss, missed opportunity, social consequence—or nothing
Why use this instead of the current alternative?	A concrete advantage experienced during use

Question	What a strong answer looks like
Who else must change?	Colleagues, spouse, manager, client, vendor, or community members
What happens on the customer's busiest day?	The product still works, becomes more valuable, or is automatically deferred
What happens after two weeks of non-use?	Easy re-entry, accumulated shame, lost data, or permanent abandonment
Can value be delivered without active use?	Email summary, automation, integration, concierge service, or embedded action

One particularly revealing question is:

What must disappear from the customer's life to make room for this product?

When the answer is "nothing," the offering is additive. Additive products compete for unclaimed time and attention, which may not exist. Stronger products often replace, compress, automate, or improve an existing activity.

How to test before building

Small organizations do not need a large research department. They need tests that impose real behavioral conditions.

The manual-delivery test: Deliver the promised outcome manually before building software. This separates demand for the result from enthusiasm for the interface.

The existing-channel test: Deliver the service through email, SMS, a calendar invitation, CRM entry, payment receipt, or existing community before asking customers to adopt a new destination.

The commitment test: Ask for money, a deposit, data access, a booked appointment, a calendar commitment, or a signed pilot agreement. Compliments are not commitments.

The no-explanation test: Give a prototype to target users who did not attend the planning meetings. Observe without coaching.

The time-to-value test: Measure elapsed time from first exposure to the first outcome the customer would recognize as valuable.

The return-without-prompting test: After an initial use, remove researcher reminders and measure whether a natural need brings users back.

The substitution test: Ask users to stop using the current alternative for a limited period. If they refuse, the incumbent behavior is stronger than survey answers suggest.

The channel auction test: Offer the same benefit through several channels and let customers reveal where they respond: email, text, calendar, web, app, direct integration, or human service.

The concierge-to-automation test: Begin with a high-touch version and document which steps customers resist, misunderstand, or fail to complete. Automate only after the behavioral sequence is understood.

Evidence should be ranked roughly as follows:

Repeated paid use > repeated unpaid use > one-time purchase > completed trial > signup > stated commitment

This hierarchy explains why people praise products they never use. Praising an idea is socially easy, costs nothing, and evaluates the product in the abstract. Use requires the person to surrender something real.

The Economics of Adoption

Behavioral assumptions must be expressed as multiplication, not optimism.

A basic adoption funnel is:

Retained active customers = addressable customers × awareness × trial × activation × retention

Suppose an organization believes it has 1,000 potential customers:

$$1,000 \times 40\% \times 10\% \times 30\% \times 20\% = 2.4$$

The organization does not have “a market of 1,000.” Under these assumptions, it has approximately two or three retained active customers.

At \$15 a month, that is about \$36 in monthly recurring revenue before payment fees, service delivery, support, marketing, or overhead.

Small differences at several funnel stages compound dramatically:

Scenario	Potential users	Awareness	Trial	Activation	Retention	Retained active users
Optimistic conversation	1,000	—	—	—	—	“Hundreds”
Weak behavioral fit	1,000	40%	10%	30%	20%	2.4
Improved awareness only	1,000	70%	10%	30%	20%	4.2
Better onboarding	1,000	40%	10%	60%	20%	4.8
Better routine integration	1,000	40%	10%	60%	50%	12

Scenario	Potential users	Awareness	Trial	Activation	Retention	Retained active users
Improved channel, trial, activation, and fit	1,000	60%	25%	60%	50%	45

The final scenario produces 18.75 times as many retained users as the weak-fit scenario without increasing the theoretical market size.

This does not mean every funnel can be improved that much. It shows why “more marketing” often produces disappointing results when activation and retention remain weak. Increasing awareness from 40% to 70% nearly doubles exposure but adds fewer than two retained users in the hypothetical weak-fit case.

A practical economic model should include:

Variable	Definition
Addressable users	People or organizations for whom the problem is genuinely relevant
Reachable users	Those the organization can realistically contact through available channels
Qualified awareness	People who both encounter and understand the offering
Trial	People who begin the real experience, not merely visit a page
Activation	Users who complete the core action and reach first value
Usage frequency	Average meaningful uses per week or month
Retention	Percentage of an activation cohort still meaningfully active after a defined period
Paid conversion	Activated users who begin paying
Revenue per account	Average recurring or transaction revenue
Gross margin	Revenue after direct delivery and service costs
Customer acquisition cost	Sales and marketing expense divided by newly acquired paying customers
Support cost	Onboarding, service, technical support, refunds, and account management
Churn	Percentage of customers or revenue lost during a period
Lifetime value	Expected gross contribution generated during the customer relationship
Payback period	Time required for gross contribution to recover acquisition cost

For a simple, stable subscription model:

$$\text{Approximate LTV} = \frac{\text{monthly revenue per customer} \times \text{gross margin}}{\text{monthly customer churn}}$$

This shortcut should be used cautiously. It becomes unreliable when cohorts are small, churn changes over time, annual contracts dominate, usage is seasonal, revenue expands within accounts, or support costs are uneven.

A more transparent model calculates expected contribution by cohort:

$$\text{Cohort contribution} = \sum_{m=1}^n (\text{customers retained in month } m \times \text{monthly gross contribution per customer}) - \text{acquisition cost}$$

The model should track **meaningful activity**, not vanity metrics. For a membership product, “logged in” may be meaningless; registering for an event, using a benefit, making a connection, or completing a transaction may be the real value event. For a publication, opening an email may be weaker than reading, clicking, listening, saving, buying the next issue, or renewing.

Minimum viable engagement

A product does not need universal adoption. It needs sufficient adoption from the right segment at sustainable economics.

The builder should calculate:

$$\text{Minimum retained customers} = \frac{\text{fixed monthly cost}}{\text{monthly gross contribution per retained customer}}$$

If a product costs \$6,000 a month to maintain and each retained customer contributes \$30 a month after direct costs, it needs 200 retained paying customers merely to cover that fixed cost.

If the reachable market contains 1,000 people, the product requires a 20% retained-paying penetration rate. That may be plausible for a mandatory, high-value professional system and unrealistic for an optional, infrequently used member app.

The model should then be stress-tested under at least three conditions:

Case	Assumption
Base	Best estimates from observed pilot behavior
Downside	Slower awareness, lower activation, faster churn, higher support
Redesign	Improvement only in stages directly affected by planned changes

The redesign case should not assume every metric improves. A shorter registration flow may improve activation but not retention. Lower pricing may increase trials but reduce perceived commitment and unit economics. More notifications may increase short-term returns while increasing opt-outs or long-term resentment.

Curiosity versus durability

Useful cohort milestones depend on the product's natural frequency:

Product rhythm	Useful checkpoints
Daily	Day 1, Day 7, Day 30, Day 90
Weekly	Week 1, Week 4, Week 12, Week 26
Monthly	Month 1, Month 3, Month 6, Month 12
Event-driven	Next relevant event, second transaction, annual recurrence
Seasonal	Same season in the following cycle
Membership	Activation, first benefit use, second benefit use, renewal

Mobile-app benchmarks differ by category, geography, operating system, and retention definition, but industry reports consistently show that installs decay sharply into much smaller retained cohorts. Downloads therefore measure acquisition, not durable behavior. ¹⁵

The financially important question is not “How many people downloaded it?” It is:

How many target users repeatedly completed the value-producing behavior at a cost the business could sustain?

Cases of success, failure, and mixed adoption

The most informative cases are not simply “successful” or “unsuccessful.” They reveal different combinations of existing behavior, friction, reward, timing, social influence, and economics.

Wordle: a recurring habit with unusually low behavioral cost

Wordle attached itself to several existing behaviors: solving newspaper word puzzles, taking a short mental break, sharing daily experiences, and discussing cultural moments online. Its rules were familiar, the game required no account, there was only one puzzle each day, and the standardized sharing grid conveyed participation without revealing the solution.

The product's scarcity limited the burden. It did not ask users to spend indefinitely, build an elaborate profile, learn a complex system, or manage a feed. The daily limit created a predictable cue and preserved anticipation. The reward—completion, mastery, and social comparison—arrived within minutes.

Wordle grew from roughly 90 daily players in November 2021 to hundreds of thousands in early January 2022 and then millions later that month. Its growth was helped by frictionless social sharing and a common daily experience rather than a conventional acquisition campaign. ¹⁶

Behavioral lesson: Wordle did create a new daily destination for many users, but it did so by compressing familiar puzzle and social behaviors into a low-risk, low-time, immediately rewarding ritual.

Duolingo: deliberate habit engineering around a long-term goal

Language learning presents a difficult behavioral problem: the ultimate reward is delayed, progress can be hard to perceive, and conventional study feels effortful. Duolingo converts the task into bite-sized lessons with immediate feedback, progress indicators, streaks, leaderboards, reminders, and social features.

As of December 31, 2025, Duolingo reported approximately 43 million daily active users with streaks of at least seven days and about 15 million with streaks of at least 365 days. Its regulatory filing explicitly describes the experience as game-like and identifies bite-sized lessons and gamification as mechanisms intended to motivate daily return. ¹⁷

The company has reported that leaderboards increased average learning time and that friendship and streak features are associated with greater engagement. These company-reported findings are useful product evidence, but they should not automatically be interpreted as independent proof that any particular feature caused long-term learning success. ¹⁸

Behavioral lesson: Products can support difficult new routines when they drastically lower session size, make progress visible, provide an immediate reward before the ultimate benefit arrives, and create reliable return cues.

Quibi: expensive content without sufficient behavioral territory

Quibi launched in 2020 as a mobile-first subscription service for short-form premium video. The proposition assumed that consumers would establish a new paid destination for professionally produced episodes designed around brief viewing sessions.

It faced a crowded entertainment market, required a new subscription and app habit, and entered during a pandemic that disrupted the commuting and on-the-go contexts central to its premise. Quibi announced that it would wind down approximately six months after launch, acknowledging that the concept may not have been strong enough to justify a standalone service or that the timing was wrong. ¹⁹

Sensor Tower estimated that only about 8% of users who began an initial free trial converted to paid subscriptions; Quibi disputed the estimate and methodology. The disagreement itself is important: externally estimated conversion metrics can be imperfect, but the service's rapid closure provides stronger evidence that sustainable adoption was not achieved. ²⁰

Quibi's content may have been professionally made, and short video was clearly popular. But consumers already had abundant short-form entertainment through YouTube, TikTok, Instagram, and other services, while premium television was available through established streaming destinations.

Behavioral lesson: A valid content format does not guarantee a viable destination. The question is not whether people like short videos; it is whether they will add and pay for this particular short-video habit rather than use entrenched alternatives.

Association apps and portals: useful content, weak destination behavior

Association and chamber apps illustrate the gap between insider enthusiasm and ordinary member behavior.

In the 2024 Association Benchmarking Report, based on responses gathered from association leaders, members being “too busy” was the most frequently cited engagement barrier, followed closely by poor promotion and inadequate segmentation. Respondents rated face-to-face events, email blasts, email newsletters, association websites, and LinkedIn among the most valuable engagement tools. General association apps fell 11 positions in the ranking, from 30 to 41, which the report interpreted as possible app fatigue. ²¹

The same report found a more favorable response to event-specific apps. That distinction is behaviorally logical. During a conference, attendees have concentrated, time-bounded needs: schedules, room locations, updates, contacts, and session information. The app has urgency, high-frequency utility, and a clear trigger. Outside the event, a general member app may compete with email, search, LinkedIn, calendars, and direct staff contact despite being technically capable of doing more. ²²

Higher Logic’s association-community benchmarking also emphasizes email digests and integration, implicitly recognizing that a community is more likely to remain visible when value is delivered into an existing inbox rather than depending entirely on voluntary destination visits. ²³

These findings are not proof that all association apps fail. The association report is based substantially on organizational perceptions rather than direct behavioral telemetry from every member. But the pattern supports an important design distinction:

- A **general destination app** asks members to create a recurring behavior.
- An **event app** captures an intense, temporary behavior.
- An **integrated member service** can bring selected value into email, calendar, payment, or event workflows.

A proprietary membership destination is more likely to work when it provides frequent transactions, exclusive and time-sensitive information, financial value, regulatory functions, identity, high participation density, or services unavailable elsewhere.

Behavioral lesson: Do not infer broad adoption from board enthusiasm or feature completeness. Test ordinary members who have weak institutional attachment, limited time, and multiple information channels.

Audiobooks: media growth by occupying previously unavailable time

Books compete not merely with other books but with every alternative use of leisure and attention.

Pew Research Center found that 75% of U.S. adults reported reading or listening to at least part of a book in the previous year in its October 2025 survey. Sixty-four percent had read print, 31% an ebook, and 26% had listened to an audiobook. Audiobook use had risen from 11% in 2011, although print remained dominant and recent changes were slower than earlier growth. ²⁴

Audiobooks can capture time that print cannot easily occupy: driving, walking, exercising, cooking, or household work. This does not mean audio replaces print for every user; many readers use multiple formats. It means the format can fit the existing life differently.

For authors and publishers, the relevant question is therefore not only “Is the book good?” It is “In what form can this material enter the audience’s available time?” A print book may require dedicated visual attention, while an audiobook can complement another low-language activity.

Behavioral lesson: Format is part of behavioral fit. Changing the channel or modality can expand usable time without changing the underlying content.

Low-cost digital purchases: high trial, uncertain use

Consider a \$4 ebook, template, mobile utility, report, or mini-course. Its price may be low enough to avoid a prolonged decision. Digital delivery can remove shipping, scheduling, and procurement friction. One-click payment can further separate the purchase decision from the later work of using the product.

Mental accounting and payment-coupling research help explain why such an item may be purchased impulsively even when a larger bundle offers better unit value. ²⁵

But the behavioral sequence after purchase may remain burdensome:

1. Locate the download.
2. Open the file or app.
3. Understand the structure.
4. Allocate time.
5. apply the material.
6. Return after interruption.
7. obtain enough value to buy again.

Low-cost digital products can therefore produce economically acceptable results under at least two different models:

- **Volume transaction model:** Profit comes from many low-cost purchases even if usage is shallow.
- **Relationship model:** The inexpensive product activates customers who later use, trust, and purchase higher-value offerings.

The builder must know which model is intended. If the \$4 product is supposed to produce recurring use, renewal, referrals, or progression into a larger service, purchase volume alone is insufficient.

Behavioral lesson: Purchase friction and usage friction are separate. Low price can improve the former while concealing weakness in the latter.

Fitness trackers: automation helps, but meaning must continue

Fitness trackers remove one major burden: they collect much of the behavioral data automatically. The user does not need to record every step manually. Yet continued use still depends on whether the data remains meaningful, goals remain relevant, the device stays charged and comfortable, and feedback leads to action.

Research with long-term older users found that sustained use was associated with personally meaningful goals, small achievable changes, and consistent time-and-place cues. Other research has documented abandonment when devices cease to provide useful insight, create maintenance burdens, or fail to fit users’ evolving priorities. ²⁶

Behavioral lesson: Automating data collection reduces burden, but data alone is not a durable reward. The product must continue helping users interpret progress and make consequential decisions.

Smartphones, e-commerce, and remote work: behavior changes when systems change

Large-scale behavioral change becomes more plausible when technology, culture, infrastructure, economics, and external events move together.

Smartphones succeeded partly because they became a portable platform for many existing needs. E-commerce reduced travel, search, inventory, payment, and delivery friction for many purchases. In the first quarter of 2026, U.S. Census Bureau estimates placed e-commerce at 16.9% of total retail sales, showing substantial adoption without implying that physical retail had disappeared. ²⁷

Remote work demonstrates the influence of external shocks and organizational systems. The COVID-19 pandemic forced rapid experimentation, employers deployed collaboration infrastructure, and millions of workers acquired the skills and equipment needed to participate. Later preferences were shaped by the experienced benefits and costs of that period. Pew found in 2025 that 46% of workers who could choose their work location and were working remotely at least sometimes said they would be unlikely to remain if remote work were eliminated. Gallup has similarly found hybrid work to be the preferred arrangement for a majority of remote-capable employees. ²⁸

Behavioral lesson: Widespread change often depends on more than product persuasion. It may require enabling infrastructure, coordinated participation, policy, cultural legitimacy, an external shock, or a strong economic advantage.

What the cases reveal

Across these examples, products capable of creating or reshaping behavior tend to satisfy several conditions at once:

Condition	Wordle	Duolingo	Event app	Audiobook	Smartphone	Quibi
Attaches to existing motivation	Strong	Strong	Strong	Strong	Very strong	Moderate

Condition	Wordle	Duolingo	Event app	Audiobook	Smartphone	Quibi
Immediate reward	Strong	Strong	Strong	Moderate	Very strong	Moderate
Frequent opportunity	Daily	Daily	High during event	Frequent	Constant	Frequent
Low initial learning	Strong	Strong	Usually strong	Strong	Moderate	Strong
Clear trigger	Daily puzzle	Reminder/streak	Event schedule	Commute/task	Device presence	Weakly differentiated
Social reinforcement	Strong	Moderate to strong	Strong	Limited	Very strong	Limited
Replaces or consolidates activity	Yes	Partly	Yes	Yes	Extensive	Unclear
Standalone destination burden	Low	Moderate	Temporarily justified	Platform-dependent	Becomes infrastructure	High
Consequence of non-use	Social/ritual loss	Streak/progress loss	Missed event utility	Low	High practical loss	Low
Outcome	Strong adoption	Strong recurring use	Context-dependent success	Growing complementary format	Widespread infrastructure	Rapid failure

The deeper conclusion is that products rarely win simply because they are novel. They win when novelty is wrapped around recognizable motives, reduced effort, strong timing, immediate feedback, social coordination, or infrastructure that makes the new action easier than the old one.

Redesign strategies

An underperforming product should be redesigned according to the point of behavioral failure.

Observed failure	Likely issue	Redesign response
Low qualified awareness	Channel or message problem	Use existing channels, sharpen the trigger and audience
Awareness but low trial	Weak relevance, trust, price, or perceived risk	Narrow the promise, add proof, reduce commitment, test pricing

Observed failure	Likely issue	Redesign response
Trial but low activation	Onboarding or time-to-value problem	Remove setup, prepopulate data, provide a guided first success
Activation but low return	Weak frequency, cues, or recurring reward	Attach use to a stable event; improve recurring value
Returns only after reminders	Product depends on external prompting	Build a natural trigger or deliver value automatically
High notification opt-out	Messages are excessive or poorly timed	Reduce volume, increase relevance, allow user control
Strong insider use, weak general use	Segment and selection bias	Redesign for less informed, less committed users
High support burden	Learning or system-fit problem	Simplify, integrate, narrow scope, or provide a service layer
High engagement, weak revenue	Business-model mismatch	Change pricing, packaging, payer, or monetization mechanism
Strong purchase, weak usage	Price lowered trial but not burden	Redesign post-purchase activation and first value
Strong use, high churn	Value is temporary or alternatives improve	Create accumulated value, improve differentiation, or accept episodic use
Weak use after several redesigns	Problem is not frequent or important enough	Stop, narrow the market, or change the product

The strongest redesign approaches follow a recurring principle: **eliminate required customer behavior before trying to motivate it.**

Reduce steps

Remove fields, credentials, permissions, decisions, navigation, and setup. Prepopulate information. Use single sign-on. Deep-link to the exact destination. Preserve progress. Do not make customers reconstruct context.

Lower risk

Offer a limited pilot, reversible commitment, transparent cancellation, sample output, money-back guarantee, or pay-after-value model. Lowering risk is different from merely lowering price.

Attach to existing routines

Tie the product to payroll, monthly reporting, a scheduled meeting, a purchase receipt, a commute, a class, an event, or another predictable occurrence.

Change distribution

A good product in a weak behavioral channel can appear unwanted. Test email, SMS, search, embedded widgets, calendar, partner distribution, sales-assisted delivery, marketplaces, and existing platforms before assuming a proprietary destination is necessary.

Integrate rather than relocate

Bring the product into tools customers already use. A dashboard insight can become a CRM alert. A member benefit can appear in a renewal email. A learning prompt can enter the calendar. A loyalty benefit can activate during payment.

Improve onboarding

Onboarding should not primarily explain the product. It should produce the first valuable outcome. The user should finish with evidence that the product works, not merely knowledge of its features.

Increase the frequency of value

A low-frequency core benefit can be supported by more frequent adjacent value, but additions should be genuinely useful. Adding generic content merely to generate activity can increase noise without strengthening the main proposition.

Strengthen triggers

A trigger should occur when the need is present, not merely when the marketer wants attention. Natural triggers outperform arbitrary reminders because the customer can immediately act.

Change pricing to match behavior

A subscription fits recurring value better than occasional value. A transaction fee may fit episodic use. A bundle can reduce repeated payment pain. Usage pricing may reduce entry risk but increase deliberation during consumption. The pricing model should follow the natural value rhythm.

Narrow the audience

A product with weak mass-market fit may have strong fit for a smaller segment with higher urgency, greater frequency, fewer alternatives, or stronger professional consequences.

Change the payer

The user, beneficiary, and payer need not be the same. Employers, sponsors, advertisers, associations, insurers, governments, or partners may fund a product when user-level willingness to pay is insufficient but broader value exists.

Change the business model

An app may work better as a feature in a service. A publication may work better as a lead generator. A community may work better as part of a membership rather than a standalone subscription. A software tool may require implementation revenue because self-service adoption is unrealistic.

Eliminate active customer behavior

The strongest redesign may turn a destination into a delivery system:

- from “check the dashboard” to “receive the exception that requires action”;
- from “enter your data” to “approve imported data”;
- from “find your benefit” to “apply the benefit automatically”;
- from “remember the report” to “receive it before the meeting”;
- from “search the member portal” to “open the relevant answer from the email.”

This is not laziness on the customer’s part. It is respect for the economic reality of attention.

The final decision tool

Use the following decision path before committing major capital, staff time, reputation, or organizational energy.

Decision question	Yes	No
Is the problem frequent, urgent, costly, emotionally meaningful, or strategically important to a defined segment?	Continue	Do not build, or narrow/ redefine the problem
Have target customers demonstrated real behavior rather than verbal enthusiasm?	Continue	Run commitment, manual-delivery, and paid tests
Does the product replace, compress, automate, or naturally follow an existing behavior?	Continue	Determine whether deliberate behavior creation is justified
Can users reach recognizable value quickly and with modest effort?	Continue	Redesign onboarding and time-to-value
Is there a reliable natural trigger for recurring use?	Continue	Embed the product in an existing workflow or create a credible trigger
Do activated users return without intensive manual chasing?	Continue	Diagnose reward, frequency, and routine fit
Are retention and usage strong among ordinary target customers, not just insiders?	Continue	Expand testing beyond boards, employees, fans, and early adopters

Decision question	Yes	No
Does realistic retained adoption support delivery, acquisition, support, and fixed costs?	Continue	Change segment, pricing, channel, model, or stop
Is a proprietary app or destination essential to delivering the value?	Build it only if evidence supports it	Deliver through existing channels or integrations
Is the behavioral burden high but the potential value exceptionally high?	Consider deliberate behavior creation	Redesign to capture existing behavior
Can the organization afford the education, repetition, incentives, infrastructure, and time required to establish the behavior?	Run a measured behavior-creation strategy	Do not depend on a new habit
Have the largest burdens been reduced without producing sustainable use?	Reconsider the underlying need and economics	Continue disciplined iteration

The four outcomes are:

Decision	Conditions
Proceed as designed	Real customers have demonstrated activation, repeated use, retention, willingness to pay, and workable unit economics; the product fits an existing routine or has already established a new one.
Proceed, but redesign around existing behavior	The problem and value are credible, but customers struggle with channel, access, onboarding, memory, frequency, workflow, or return behavior.
Invest deliberately in creating a new behavior	The potential value is high; the need is frequent or consequential; rewards arrive quickly; social, technological, cultural, or regulatory conditions are favorable; and the organization can finance sustained education and reinforcement.
Do not build	Adoption depends mainly on customers becoming more attentive, motivated, organized, loyal, technically confident, or interested than evidence suggests—and realistic adoption cannot support the economics.

The stopping rule should be explicit:

Stop trying to change the customer when repeated evidence shows that the product requires more behavior than its value can earn.

That is not a failure of ambition. It is disciplined innovation.

Builders should still attempt difficult things. They should create new categories, challenge routines, and introduce better ways of living and working. But they should not confuse the importance of an outcome with the likelihood that customers will perform every action required to achieve it.

The real design task is larger than building the object.

It is designing the path by which the object becomes understandable, credible, accessible, useful, repeatable, memorable, affordable, and economically sustainable inside a life that is already full.

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