Introduction to Troubleshooting Common UX Design Problems

- Diagnose patterns, not screens — most beginner UIs fail from a few repeatable mistakes
- Four diagnostic lenses: evidence, navigation, interaction, and usability
- Separate visible symptoms from root causes before proposing any redesign
- Roadmap: evidence workflow → navigation/IA → interaction and flow → usability → prioritization → workshop



Evidence workflow → Navigation/IA → Interaction and flow → Usability → Prioritization → Workshop

The Troubleshooting Mindset: Symptoms vs. Root Causes

LOOK DEEPER
SOLVE SMARTER
BETTER EXPERIENCES



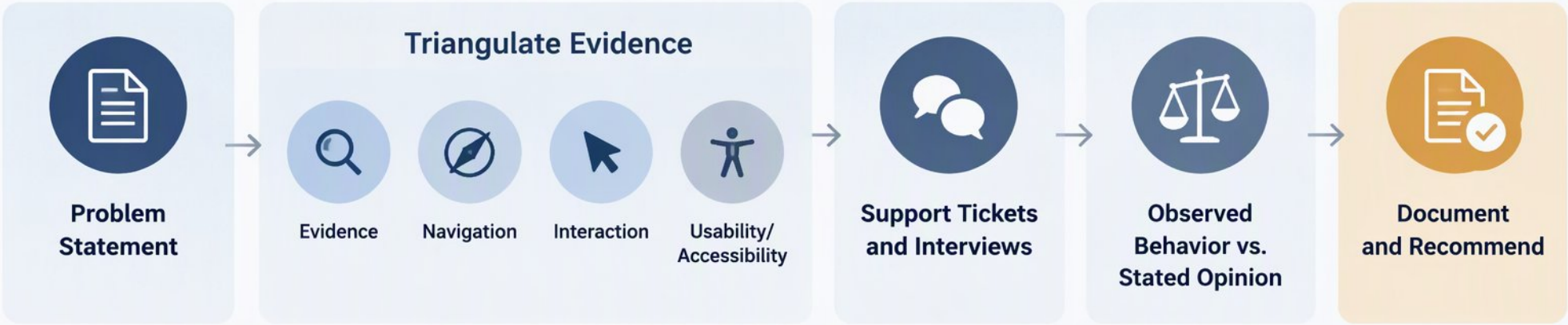
- Beginner UIs fail from repeatable, fixable mistakes, not lack of skill
- Diagnose patterns across screens, not one-off visual issues
- Memorize problem classes: no clear path, missing feedback, misleading interface
- Team bias: designers and PMs are least representative users of what they build
- Describe problems in user-behavior terms before proposing any solution

CURIOSITY
LEADS TO
CLEARER SOLUTIONS

Building an Evidence-Based Diagnosis Workflow

FROM QUESTIONS TO ACTION

UNDERSTAND
INVESTIGATE
SYNTHESIZE
IMPROVE



1. Write a clear problem statement and research question first
2. Triangulate: analytics shows where, sessions show why
3. Support tickets and interviews confirm how often it happens
4. Separate observed behavior from stated opinion and intuition
5. Document: problem, evidence, confidence, recommendation, owner

BETTER DIAGNOSIS
LEADS TO BETTER OUTCOMES

Triangulating Signals Without Fooling Yourself

Qualitative answers why; quantitative answers how many and how much — use both

Conflicting findings? Don't average them — check same users, task, context, then follow up

Analyze usability data in four steps: collect, assess accuracy, explain, check fit

Inspect the happy path and every failure path before concluding



LOOK DEEPER
MAKE BETTER DECISIONS

Spotting Problems in Navigation and Information Architecture

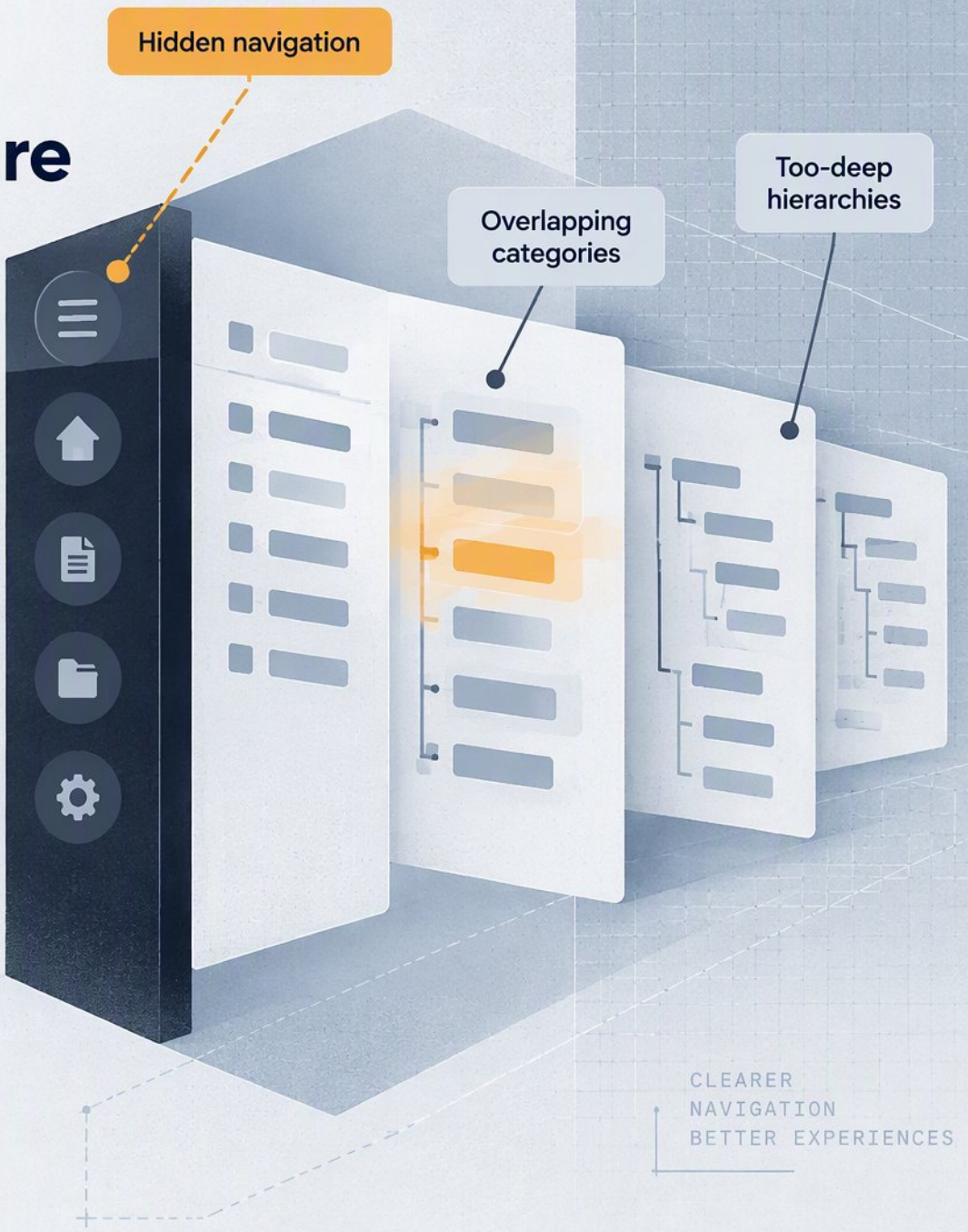
Users can't find features, backtrack constantly, or can't describe the nav

Diagnose weak labels, overlapping categories, too-deep hierarchies, hidden navigation first

Content failures: icon-only sidebars, cross-section inconsistencies, primary actions too far

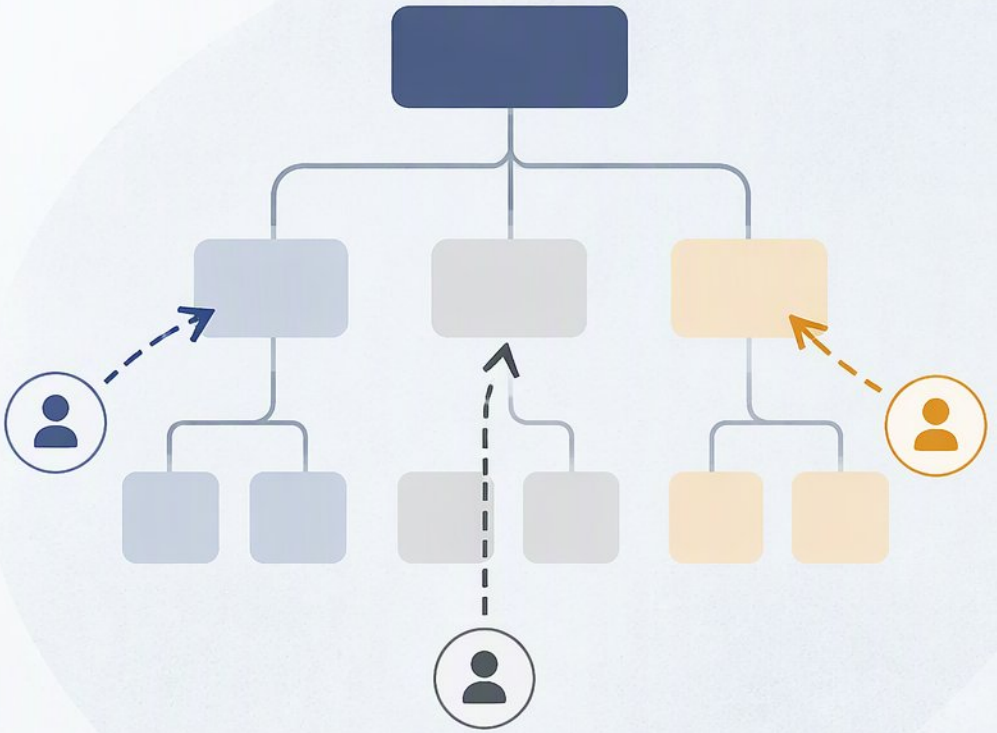
Quick fixes: relabel, cross-reference links, move an item

Structural changes: merge, split, restructure — know when each is warranted



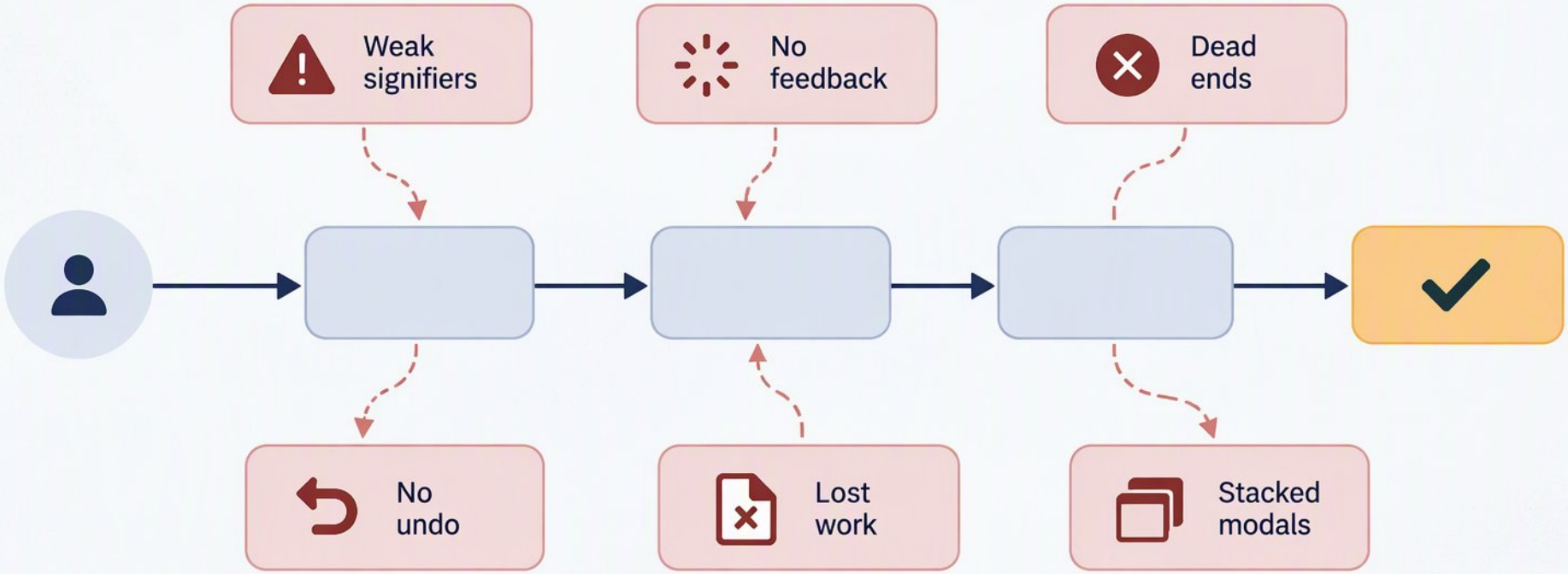
Validating Structure with Tree Tests and First-Click Tests

- Tree testing evaluates labels and hierarchy with no visual design — you need only a tree and task list
- Key metrics: success rate, directness, time, first click, and final destination
- First click is the strongest predictor of success — wrong first clicks mean labels or category structure mislead users
- Read pathways: distributed first clicks suggest overlapping categories; correct-first-click/low-success suggests overlapping subcategories; follow up with click tests and usability tests in the real UI



Diagnosing Interaction and Flow Breakdowns

FIND ISSUES. UNDERSTAND CAUSES. DESIGN BETTER FLOWS.



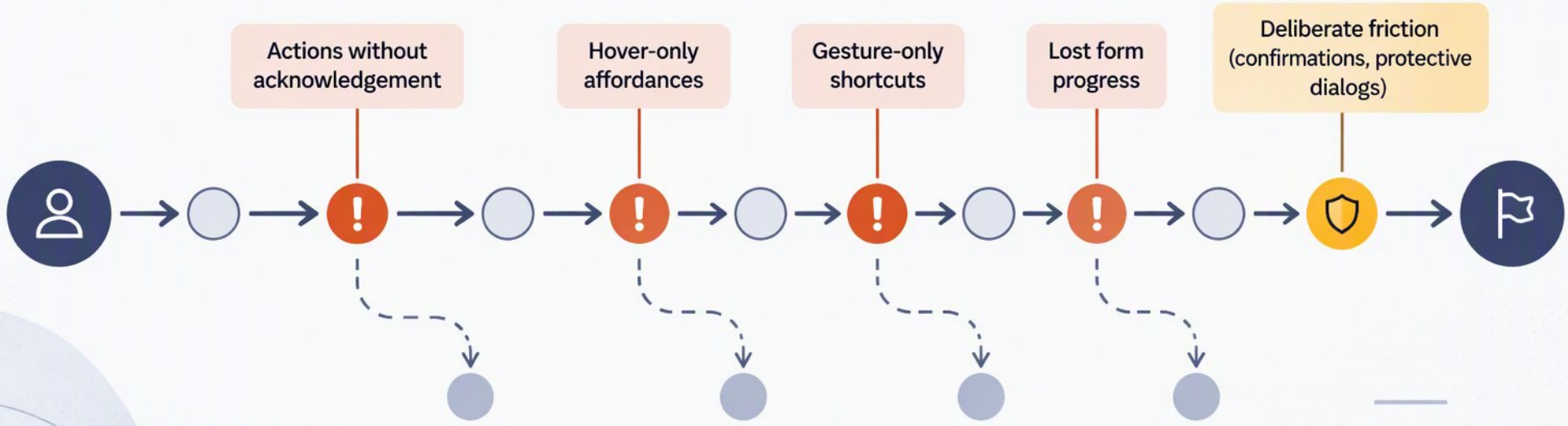
- Core failures: weak signifiers, no feedback, dead ends, no undo, lost work, stacked modals
- Draw the flow first: happy path is a few boxes; most of the diagram is failure states
- Match feedback to wait: instant under 0.1s, indicator 1–10s, progress and escape over 10s
- Separate design defects (signifier, feedback, state) from implementation bugs with engineering

BETTER INTERACTIONS
BRIGHTER OUTCOMES

Locating Friction on User Flows

SMOOTHER EXPERIENCES STRONGER OUTCOMES

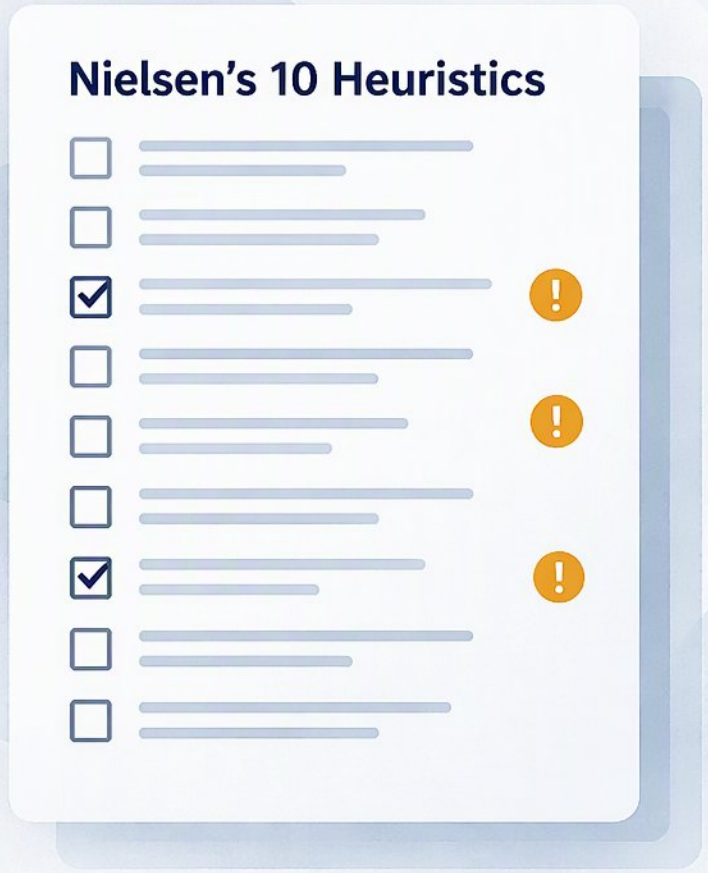
- Map the real path users take, including alternate entry points and analytics drop-off points.
- Watch for these friction patterns: actions without acknowledgement, hover-only affordances, gesture-only shortcuts.
- Also flag lost form progress and confirmation dialogs used instead of good design.
- Friction is not always a defect: deliberate friction (confirmations, protective dialogs) belongs where mistakes are costly.
- Tie each friction point to frequency and impact to prioritize fixes.



UNDERSTAND
IDENTIFY
IMPROVE

Usability Issues: Heuristic Evaluation and Testing

- Use Nielsen's 10 heuristics as a fast, expert diagnostic checklist
- Heuristic evaluation finds systemic issues; usability testing finds real task failures
- Severity = frequency × impact × persistence, rated 0–4
- Average individual ratings from at least three evaluators
- Run a heuristic pass, then confirm with ~5 usability test participants



FOUR DIAGNOSTIC LENSES

Evidence

Navigation

Interaction

Usability/ Accessibility

Accessibility as a Troubleshooting Lens

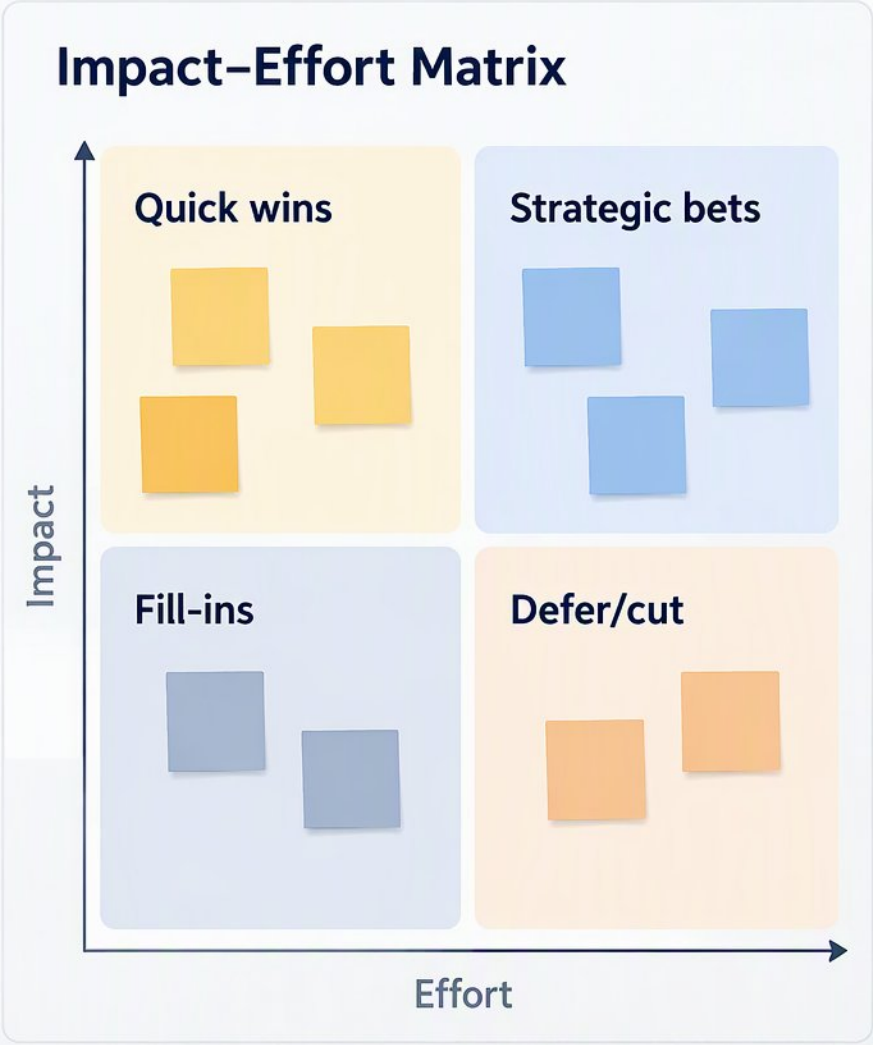
- Accessibility failures often appear first as usability complaints
- Hover-only actions, placeholder labels, invisible focus, tiny targets
- Quick manual checks: contrast in every state, Tab order, form labels
- Automated tools catch roughly half of WCAG issues — pair with manual checks
- Log findings with WCAG criterion, user impact, and remediation owner



Prioritizing and Communicating Fixes

ALIGN
PRIORITIZE
MAKE PROGRESS

- Score issues on shared impact dimensions: revenue, reach, severity, strategic alignment
- Severity scale: blocking, degrading, or annoying when encountered
- Impact–effort matrix quadrants: quick wins, strategic bets, fill-ins, defer/cut
- Vote silently by domain expertise, then discuss and negotiate placement
- Write recommendations with problem, evidence, rationale, and expected outcome
- Keep a public not-fixing list; revisit deferred issues quarterly



Not-fixing list

Revisit deferred issues quarterly.

FOCUS / CLARITY / BETTER OUTCOMES

Case Study: End-to-End Troubleshooting Walkthrough

FROM EVIDENCE
TO BETTER EXPERIENCES



- Feature moved in redesign: visits drop 92%, flagged by page analytics
- Session replays show users miss the new tab placement
- Tooltip intervention lifts visits 75% — proves placement was the cause
- Navigation case: card sort surfaced confusable terms; tree test validated simpler structure
- Lessons: validate before redesigning, let evidence overrule intuition, measure every fix

Practice Workshop: Diagnose a Broken Experience

- Apply the four diagnostic lenses to a sample product with three planted issues

FOUR DIAGNOSTIC LENSES

Evidence

Navigation

Interaction

Usability/ Accessibility



Activity 1

Write a problem statement and choose evidence sources

Activity 2

Run a first-click or heuristic pass; map one flow; rank issues by severity and impact

Activity 3

Present findings in three minutes with evidence and a recommended fix

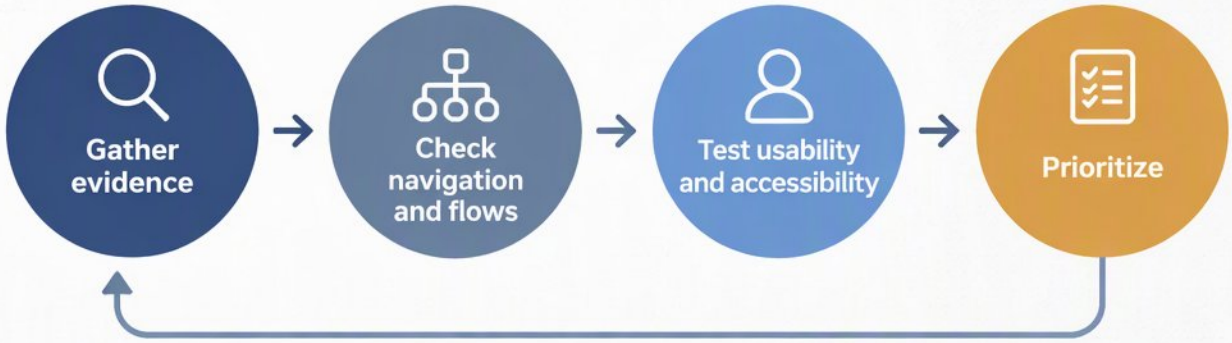
Peer feedback and facilitator debrief close the loop

Takeaways and a Reusable Troubleshooting Checklist

OBSERVE
UNDERSTAND
IMPROVE

Habit loop

Habit loop: gather evidence → check navigation and flows → test usability and accessibility → prioritize



Checklist

- [ ] Clear problem statement
- [ ] Triangulated evidence
- [ ] Real-label IA tests
- [ ] Failure states drawn
- [ ] Quick accessibility checks

Rank and track

- Rank issues by impact and effort; log deferred items publicly

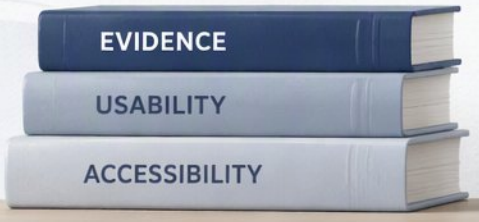
Build the habit

- Five recorded sessions monthly, tagged research backlog
- Review assumptions

Follow-up

- Follow-up: **NN/g** triangulation, tree testing, severity; **W3C** WAI tools; **axe**/Lighthouse; Nielsen's heuristics

BETTER
EXPERIENCES
TOGETHER



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