

Information Architecture Fundamentals



- IA is the structural design of shared information environments for findability and usability



- Focuses on organizing, labeling, and connecting content so users can find what they need



- Four core systems: organization, labeling, navigation, and search



- This training covers principles, pitfalls, methods, and deliverables—not visual design or engineering



- By the end, you'll audit, test, and improve findability and navigability in your own products



Why IA Fails:

Common Pitfalls in Products and Content



Users search where they expect, not where things are placed



Internal jargon and "clever" labels create cognitive friction



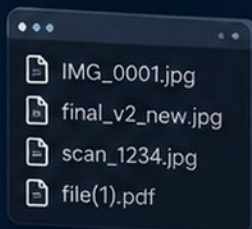
High-frequency features buried in deep menus or drawers



Meituan's 12 ungrouped functions, Gumroad's raw filenames, Instagram's grid shift, Gemini's relocated account switcher



Meituan's 12 ungrouped functions



Gumroad's raw filenames



Instagram's grid shift



Account

Profile

Settings

Switch account

Gemini's relocated account switcher

The Business Cost of Bad IA



- Poor IA lowers conversion, raises abandonment, and increases support tickets



- Users blame the product, not the structure, leading to churn and negative reviews



- Zero-results searches represent lost demand and hidden revenue



- Dark patterns in settings and filters erode trust and damage brand perception



- IA is a strategic investment in revenue capture, retention, and operational efficiency



Organization Systems: Structuring Content for Findability



- **Exact vs. ambiguous schemes:** alphabetical, chronological, or geographical vs. topical, task-based, or audience-based



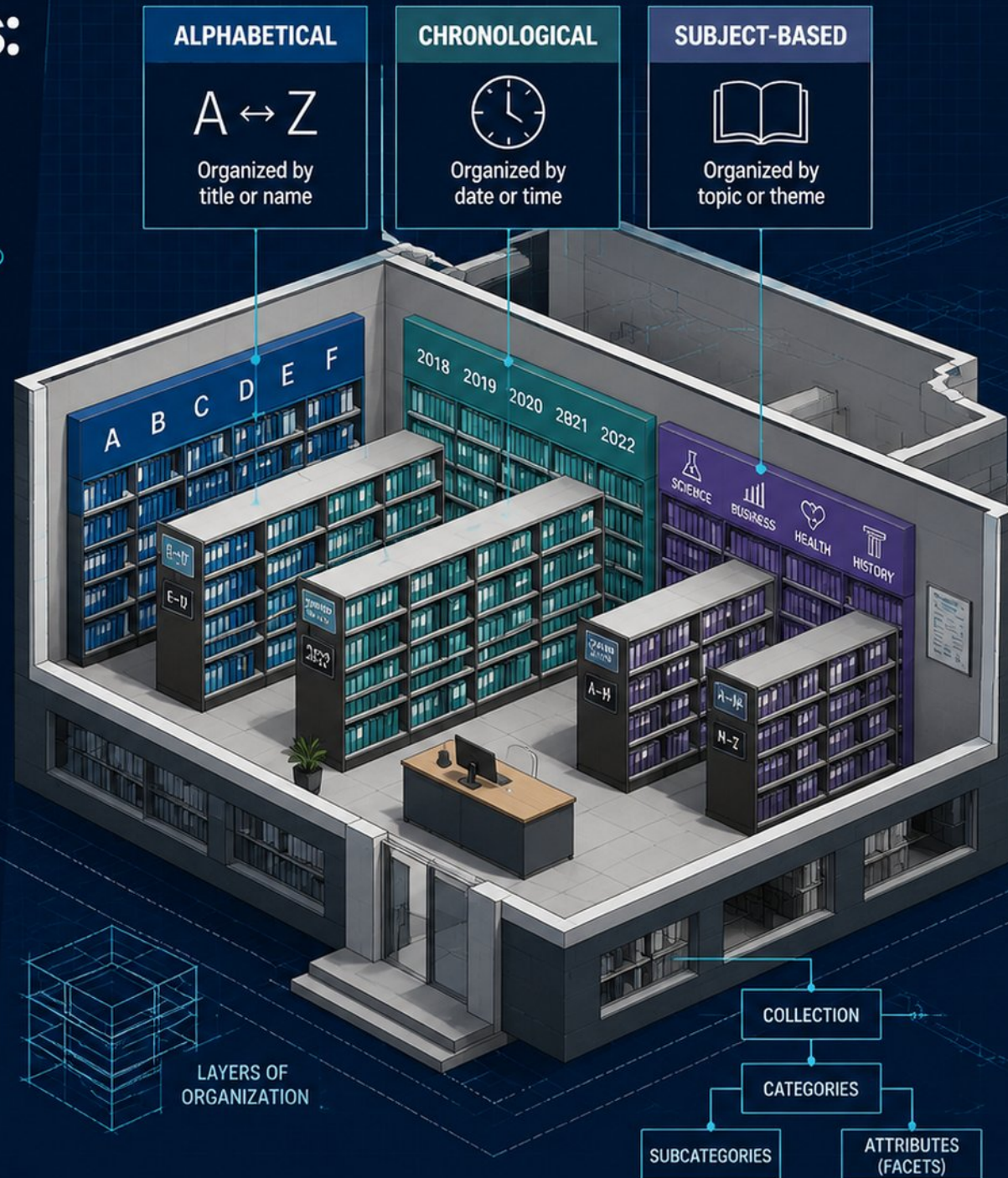
- **Hierarchies, faceted classification, and polyhierarchies** for different content types and user goals



- **Depth vs. breadth trade-offs:** shallow structures with many options vs. deep with fewer choices



- **Practical exercise:** restructure a messy content set and decide what goes where



Labeling Systems: The Words That Guide Users



- Labels reduce cognitive load—use user vocabulary, not internal jargon



- Be specific: verb + object for buttons, match link text to destination



- Information scent: weak or clever labels break the trail and cause abandonment



- Test labels via search logs, support tickets, Google Trends, and content testing



Navigation Systems: Helping Users Find Their Way



- Global, local, and contextual navigation each serve distinct wayfinding roles



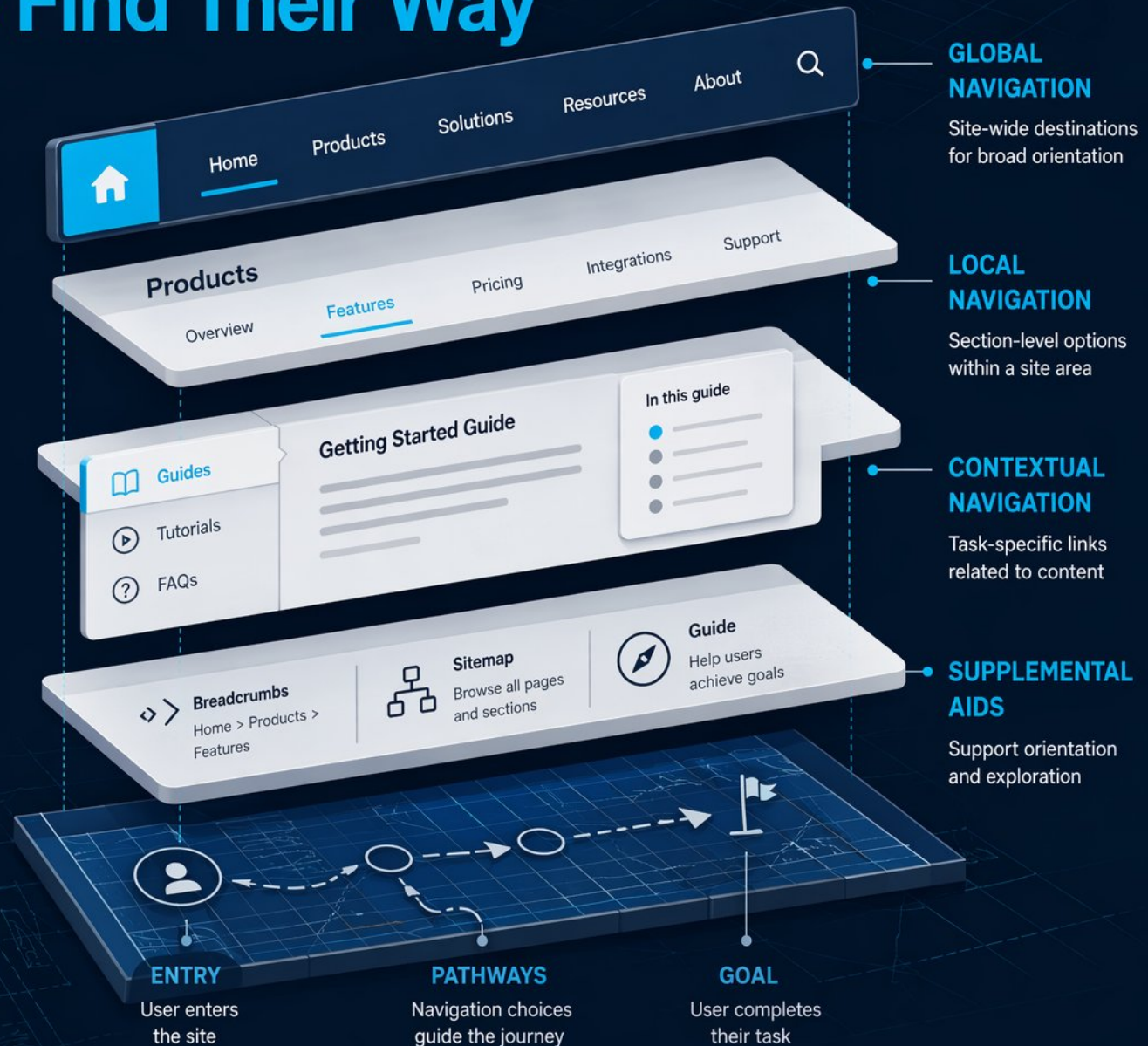
- Breadcrumbs, sitemaps, and guides act as supplemental navigation aids



- Hamburger menus weaken information scent; persistent bars improve mobile findability



- Evaluate navigation via heuristic review, click-path analysis, and exit-rate audits



Search Systems: Designing for When Users Don't Browse



- Heavy search use often signals underlying IA problems, not just user preference.



- Input design: visible bar, hint text like "Search products, categories..." and clear button.



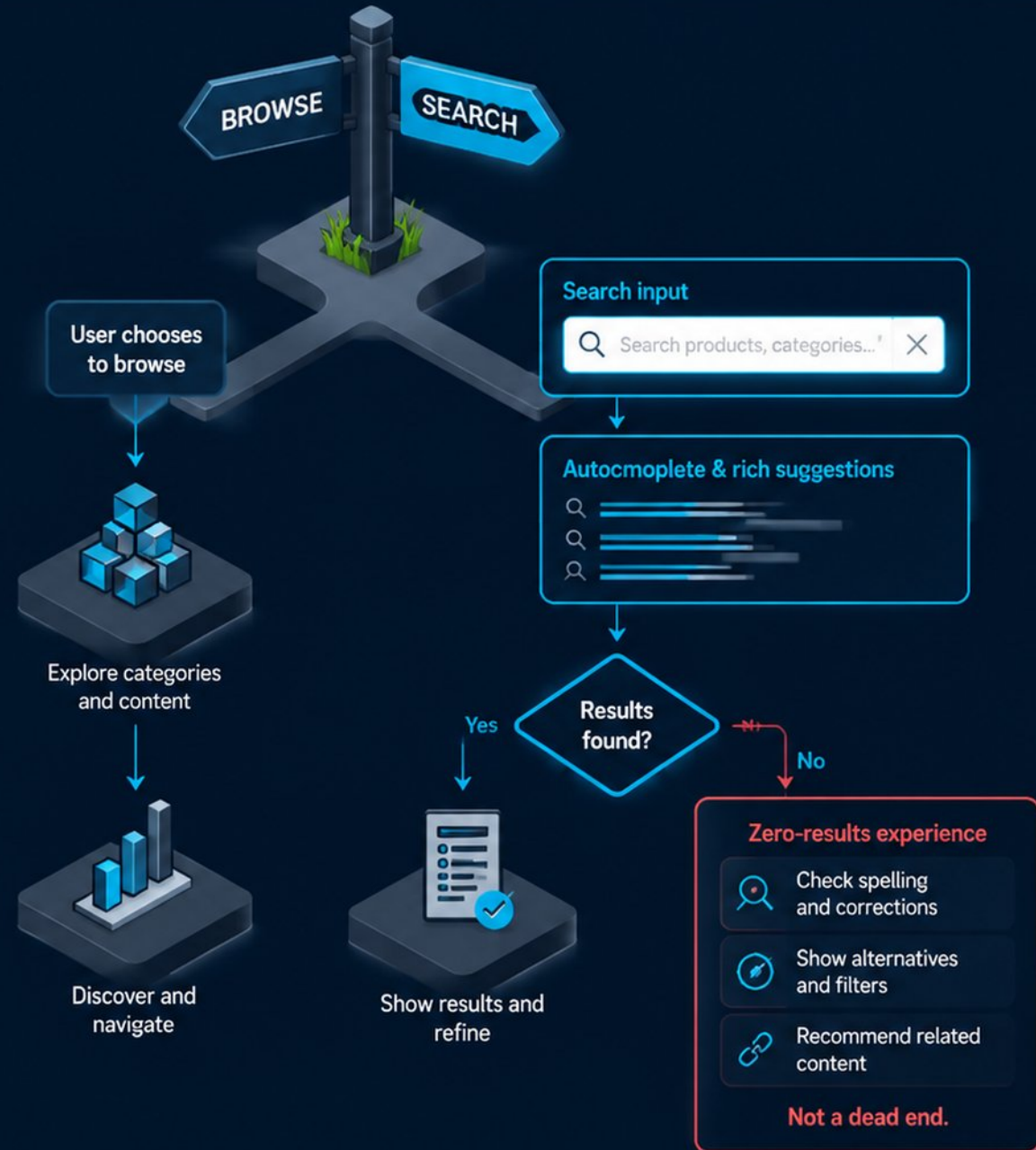
- Autocomplete and rich suggestions reduce zero-result failures before they happen.



- Zero-results pages must offer alternatives, spelling corrections, and related content—not dead ends.



- Search quality depends on metadata: if attributes aren't in the data model, users can't search by them.



Search Results: Making Every Result Count



- Each result needs strong information scent: image, title, key attributes, and a dynamic excerpt



- Match result format to mental model: product cards, document cards, or people cards



- Default sort order matters; filters should reflect user decision criteria, not database fields



- On mobile, prioritize critical info per result; bottom-anchored filter bars outperform top drawers



E-COMMERCE (Products)



GOOD: Helpful, Scannable, Relevant



Wireless Over-Ear Headphones

★★★★★ 4.6 (1,248)

\$129.99

In stock • Free shipping

Bluetooth 5.3 • 30h Battery • Noise Cancelling
Foldable • Built-in Mic

Enjoy immersive sound with adaptive noise cancellation and all-day comfort. Perfect for work, travel, and everyday listening.



BAD: Sparse, Vague, Low Value



Headphones

Item #12345

\$129.99

In stock

KNOWLEDGE BASE (Documents)



How to Reset Your Account Password

Account Management > Security

Updated May 7, 2024 • 5 min read

Step-by-step instructions to reset your password across web and mobile. Includes troubleshooting tips and account recovery options.

Password

Reset

Security



Password Reset

Doc ID: 67890

Updated 05/07/24

PEOPLE (Profiles)



Maya Chen

Senior Product Manager • Product Team
mchen@company.com • (617) 555-0189

Expert in search UX, personalization,
and analytics-driven product strategy.

Search UX

Analytics

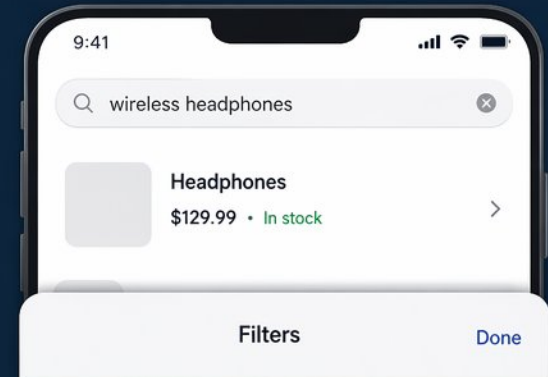
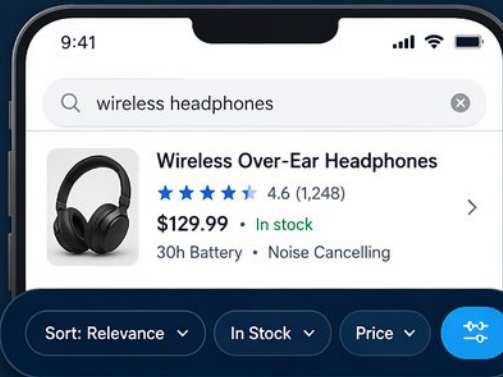
Product Strategy



M. Chen

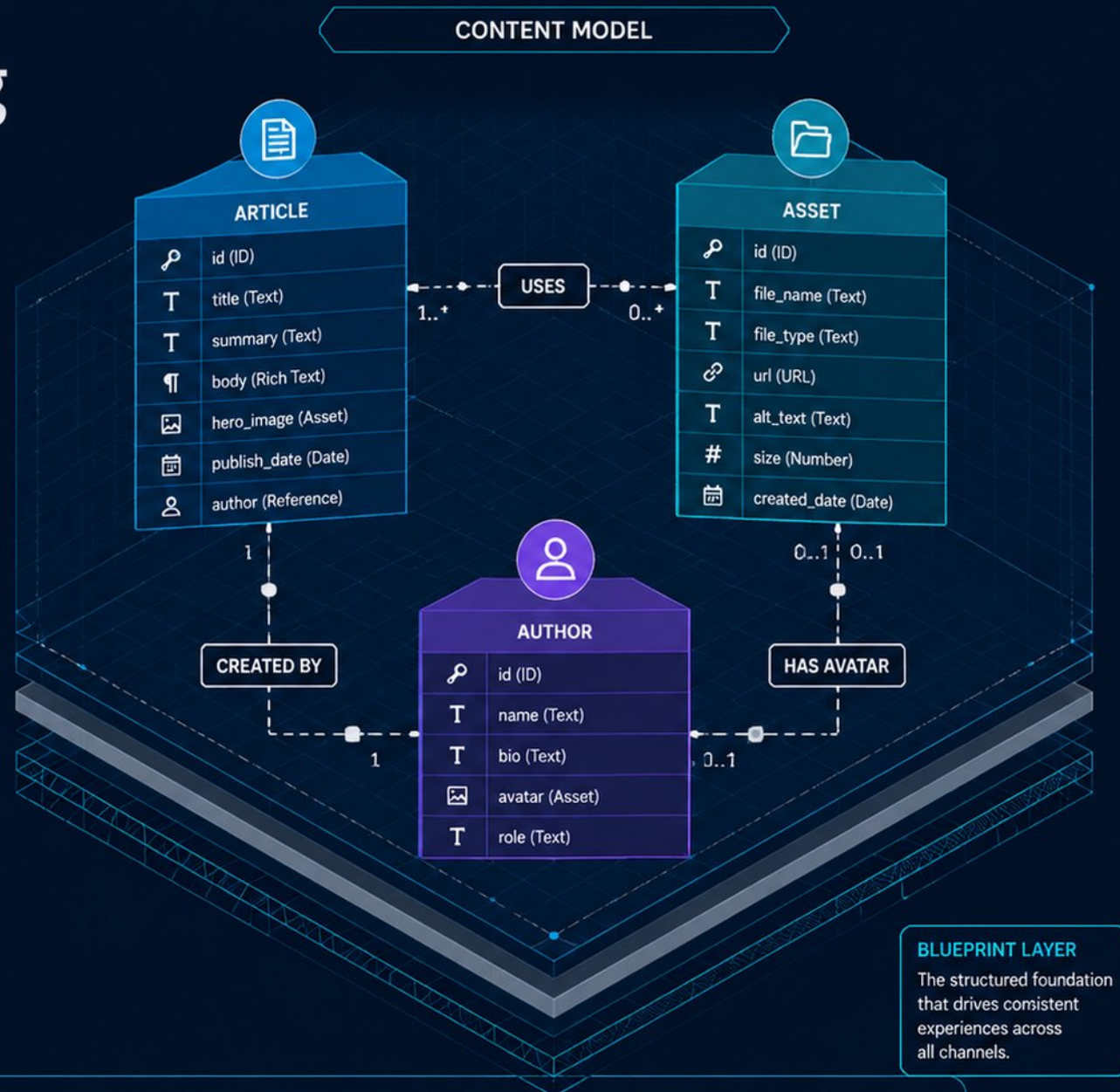
Product Manager
mchen@company.com

MOBILE EXPERIENCE



Content Modeling and Metadata

- Content model: structured definition of content types, attributes, and relationships—the blueprint before UI
- Schemas enable consistent display, filtering, and reuse across channels
- Metadata powers navigation, search, personalization, and governance
- Designers must define content types and metadata requirements, not just the interface



NAVIGATION

Metadata organizes content for intuitive browsing.



SEARCH

Metadata enables accurate and relevant results.



PERSONALIZATION

Metadata powers tailored experiences for users.



GOVERNANCE

Metadata ensures quality, compliance, and lifecycle management.

Research Methods for IA: Card Sorting



- **Open sorts:** users create their own groups and names, revealing mental models and vocabulary



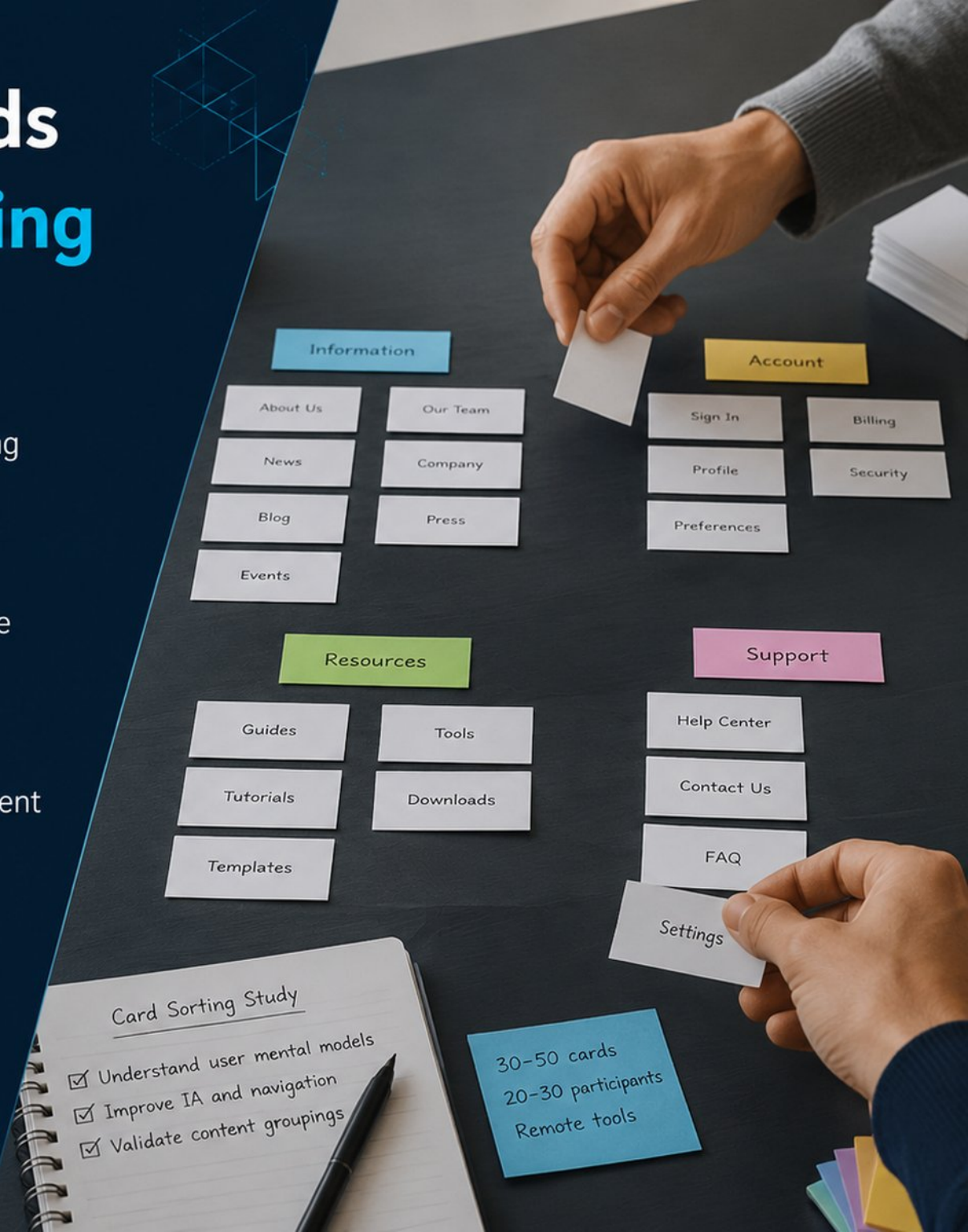
- **Closed sorts:** users sort into predefined categories to validate your proposed structure



- **Hybrid sorts:** combine both approaches for iterative refinement



- **Practical tips:** 30–50 cards, 20–30 participants, use remote tools for analysis



Research Methods for IA: Tree Testing and Beyond



- Tree testing isolates findability—participants navigate text-only hierarchies, no visual design influence



- Success rates below 50% per destination signal structural revision; directness scores reveal where users get lost



- Journey mapping exposes IA pain points: stalls, backtracks, and abandonment drop-offs

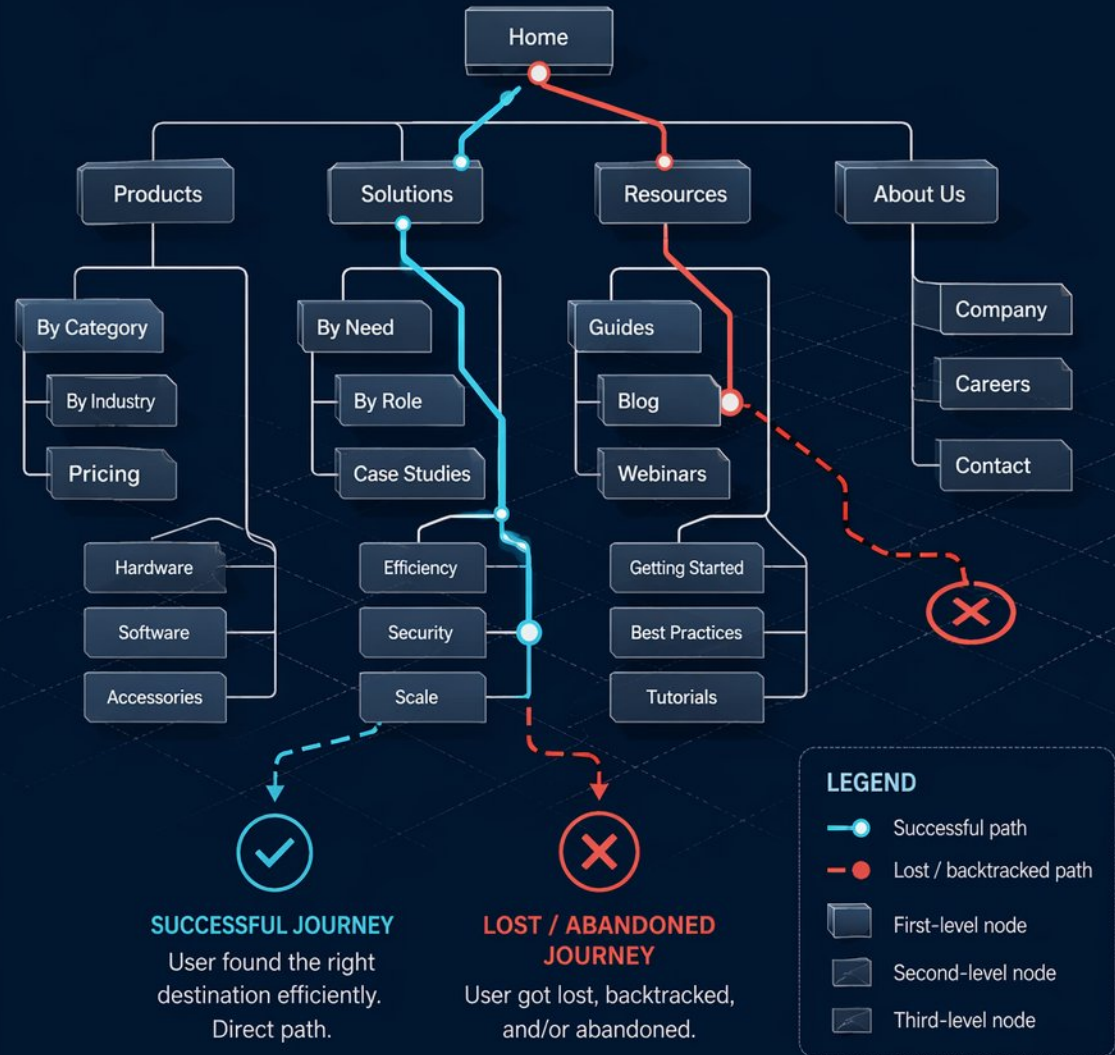


- Run tree tests after card sorting to validate your structure before wireframing



- Tools like Optimal Workshop and ValidateThat support remote tests; no dedicated researcher required

TEXT-ONLY IA TREE (EXAMPLE)



TANGLED PATHS

Confusion, detours, and dead ends.



CLEAR PATHS

A clear structure leads users to their destination.



IA in Practice: Deliverables That Drive Decisions



Common IA deliverables:

sitemaps (visual & annotated), taxonomies, controlled vocabularies, navigation specs, and metadata schemas.



When to create each:

discovery (content inventory) → structural modeling (candidate sitemaps) → validation (test reports) → handoff (IA specification).



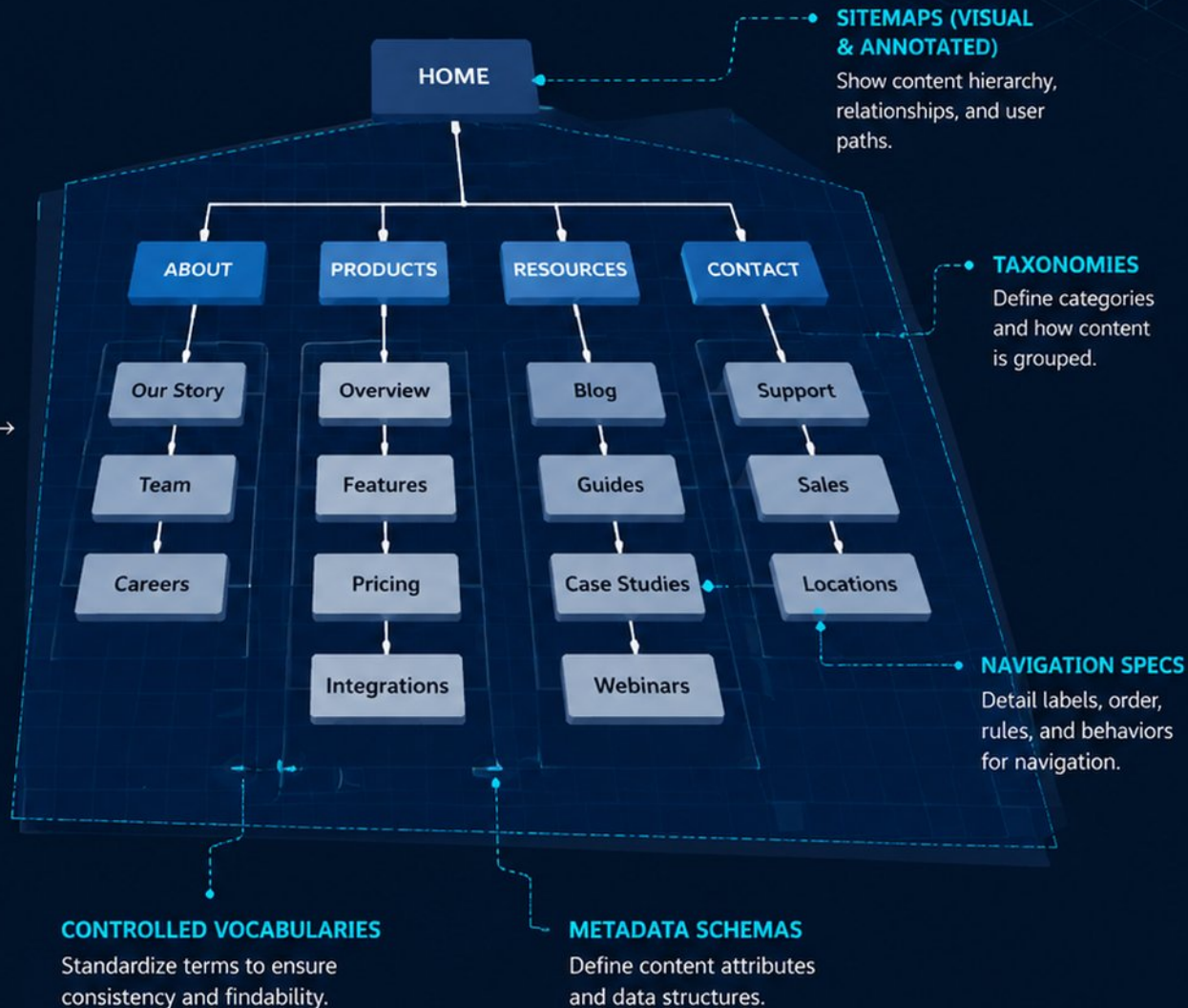
Tools:

Whimsical/Miro for collaborative sitemaps; Figma for annotated navigation wireframes.



Integrate IA into agile:

make structural work iterative and embed it into component libraries.



IA Governance: Keeping Structures Healthy Over Time



- IA degrades as content grows faster than organization and labels drift across releases



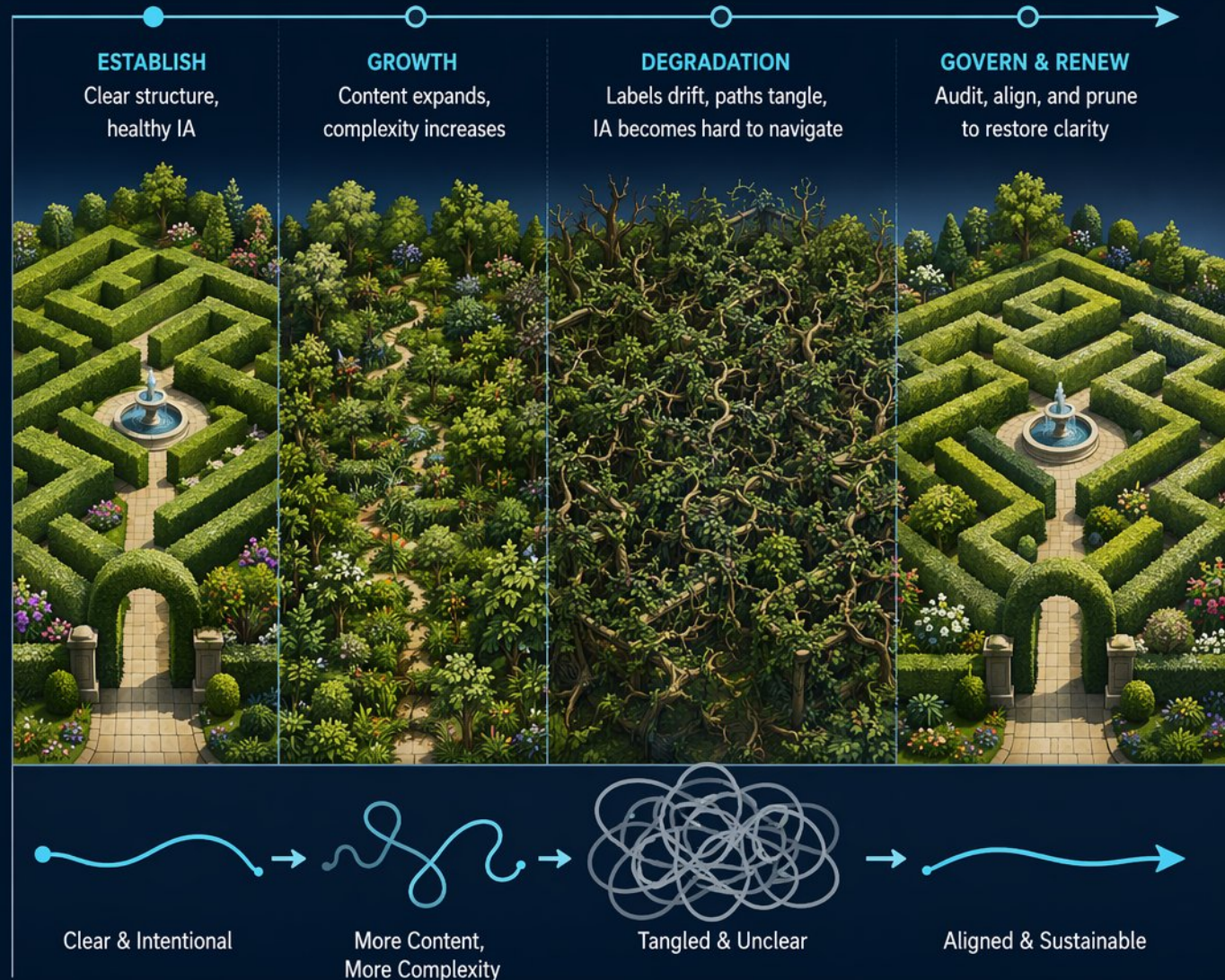
- Audit periodically: content inventory, taxonomy review, search analytics (zero-results, top queries)



- Assign ownership: build cross-functional accountability even without a dedicated IA team

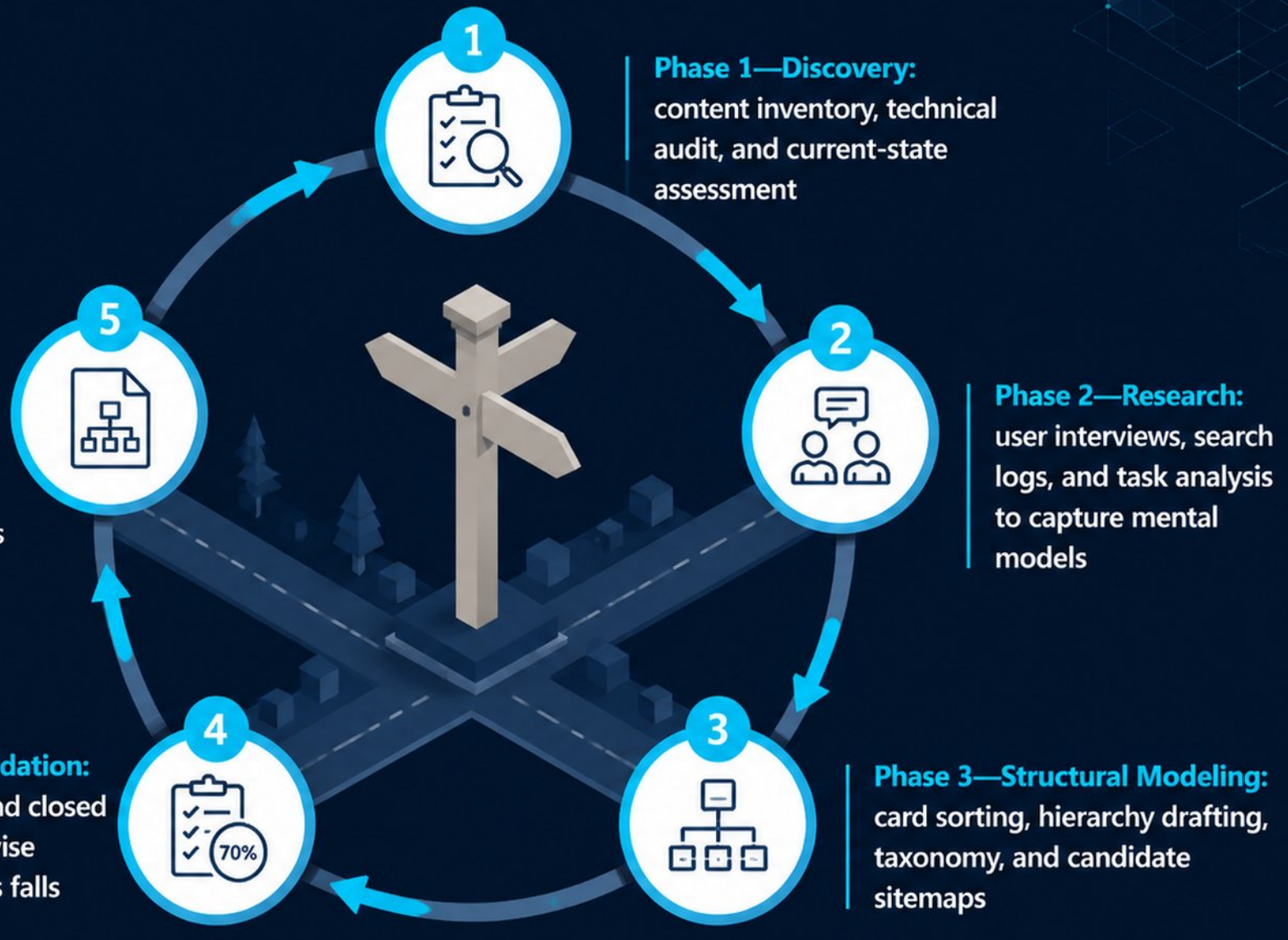


- Pre-launch checklist: consistent labels, validated navigation, working search, clear metadata, tested paths



Good IA doesn't happen once. It's cultivated, maintained, and renewed—continuously.

The IA Design Process: End-to-End



Six Principles for Successful IA

-  Navigation labels tell a story: your primary nav communicates proposition and personality.
-  Organize around user tasks, not internal org charts or company structure.
-  Restrict choices to reduce cognitive load; fewer, confident steps beat overwhelming options.
-  Being found matters more than being in the global nav—not everything needs a top-level link.
-  Labels should be short, meaningful, and in the user's language, not the company's.
-  Create flow with consistent organizational metaphors so users build a reliable mental model.



Applying IA Fundamentals to Your Current Project



- **Start with a structured discovery audit:** zero-results searches, filter gap maps, category exit rates, and real-query tests.



- **Identify quick wins:** fix broken labels, merge duplicate nav items, surface buried high-frequency features, and improve zero-results pages.



- **Run lightweight research:** a single open card sort with 15-20 participants reveals major structural issues.



- **Build a roadmap:** prioritize by impact (high-traffic, high-abandonment) and effort (label changes vs. structural redesigns).

OPEN CARD SORT INSIGHTS

Users group
"Reports"
with
"Analytics"

"Resources"
is unclear

Expect
"Integrations"
higher

Confusion
between
"Settings"
and "Admin"

IA ROADMAP



LABEL

Next Steps and Resources



- - IA is the structural foundation of findability; test with users, not assumptions



- - Labels and navigation are your highest-leverage tools



- - Start with a small, measurable pilot project framed in business terms



- - Recommended books: Rosenfeld/Morville/Arango, Abby Covert, Steve Krug



- - Key tools: Optimal Workshop, ValidateThat, Whimsical for sitemaps



PersonWise.

PersonWise • AI digital-human course platform



Scan the code or click anywhere to watch this course live, with voice Q&A

personwise.ai/t/d983f36f/public