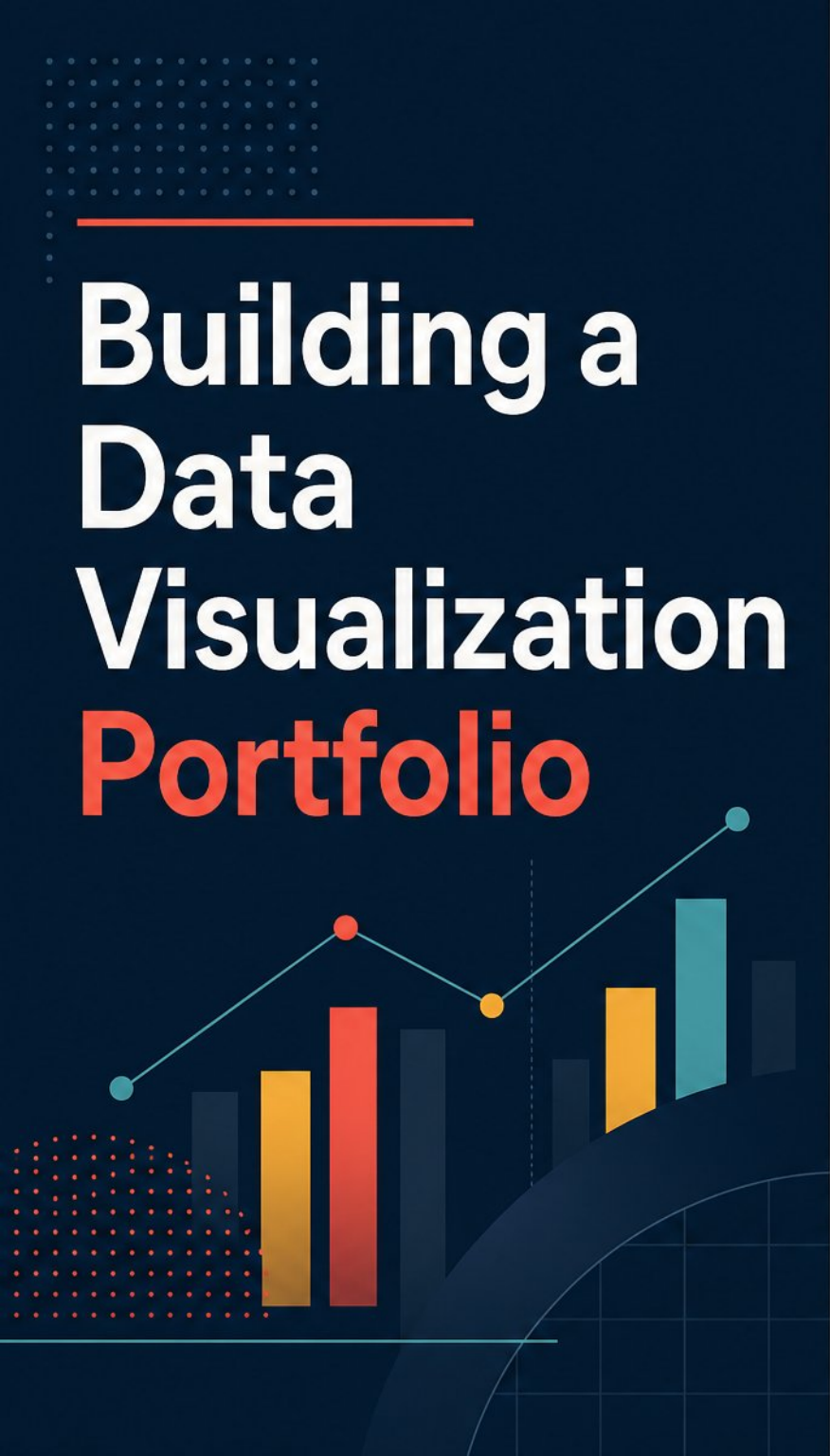


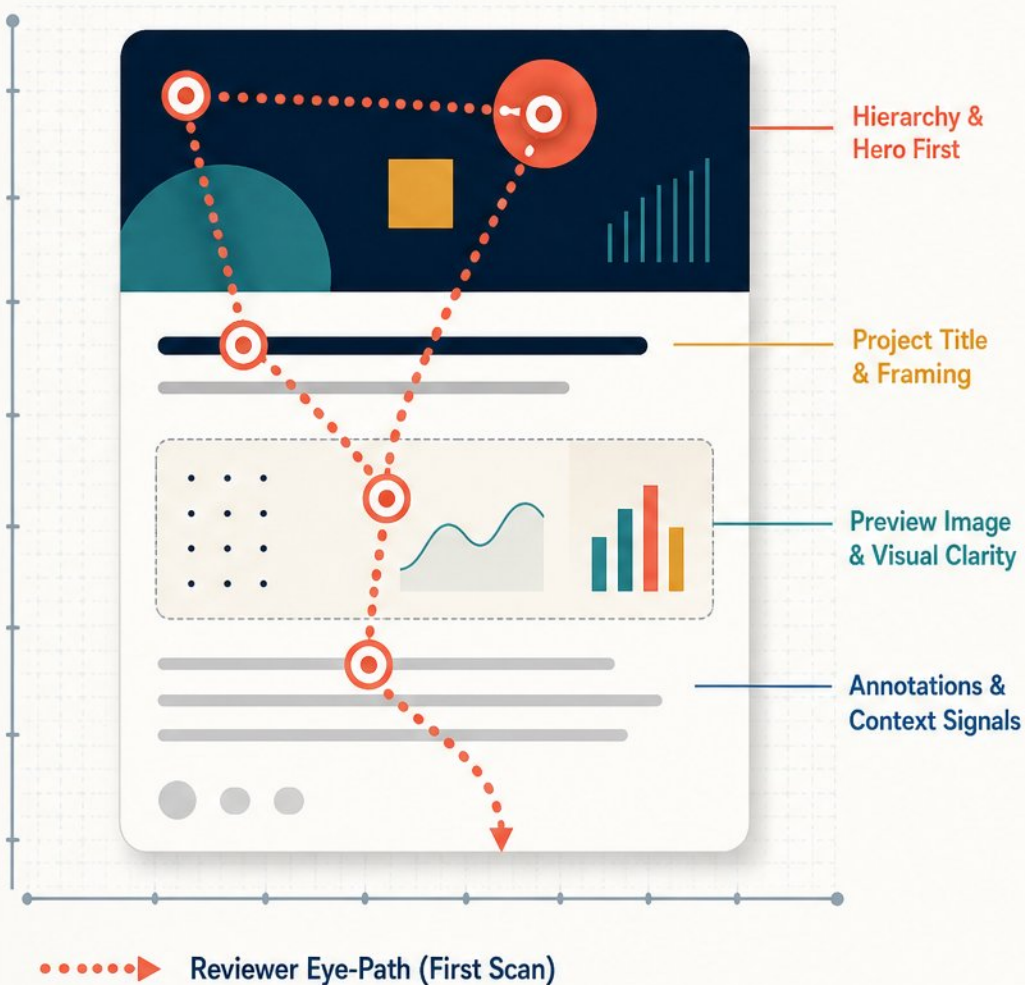


Building a Data Visualization Portfolio

- A curated body of evidence for a specific audience, not a gallery dump
- Three pillars: range of chart types, depth of craft, narrative of decisions
- Reviewers scan in under 30 seconds: lead with visual impact
- Analytics, newsroom, design, and research audiences each scan differently
- Typical formats: personal site, GitHub, Tableau Public, Flourish, PDF case deck
- Realistic build: 3-5 projects over 6-8 weeks, one deliverable each

What Reviewers Actually Look For

What Reviewers Scan For in a Visualization Portfolio



– **Rubric:** defensible data handling, perceptual clarity, hierarchy, annotation, accessibility, reproducibility



– **Disqualifiers:** misleading axes, unlabeled encodings, stock charts, no stated question



– **Non-visual signals:** strong README, source notes, method transparency, credit



– **Documented judgment wins in 2026:** a short decision log beats a polished dashboard



– **First scan is fast and visual:** hero, project titles, preview images decide the click



– **Tailor to the reviewer:** analytics, journalism, design, research weight different signals

Choosing and Scoping Portfolio Projects



- Pick 3–5 projects that show range without diluting depth



- Mix types: exploratory analysis, story, dashboard, map, interactive, redesign



- Choose a domain that signals your target industry



- Skip overused sets like Iris and Titanic; use open data

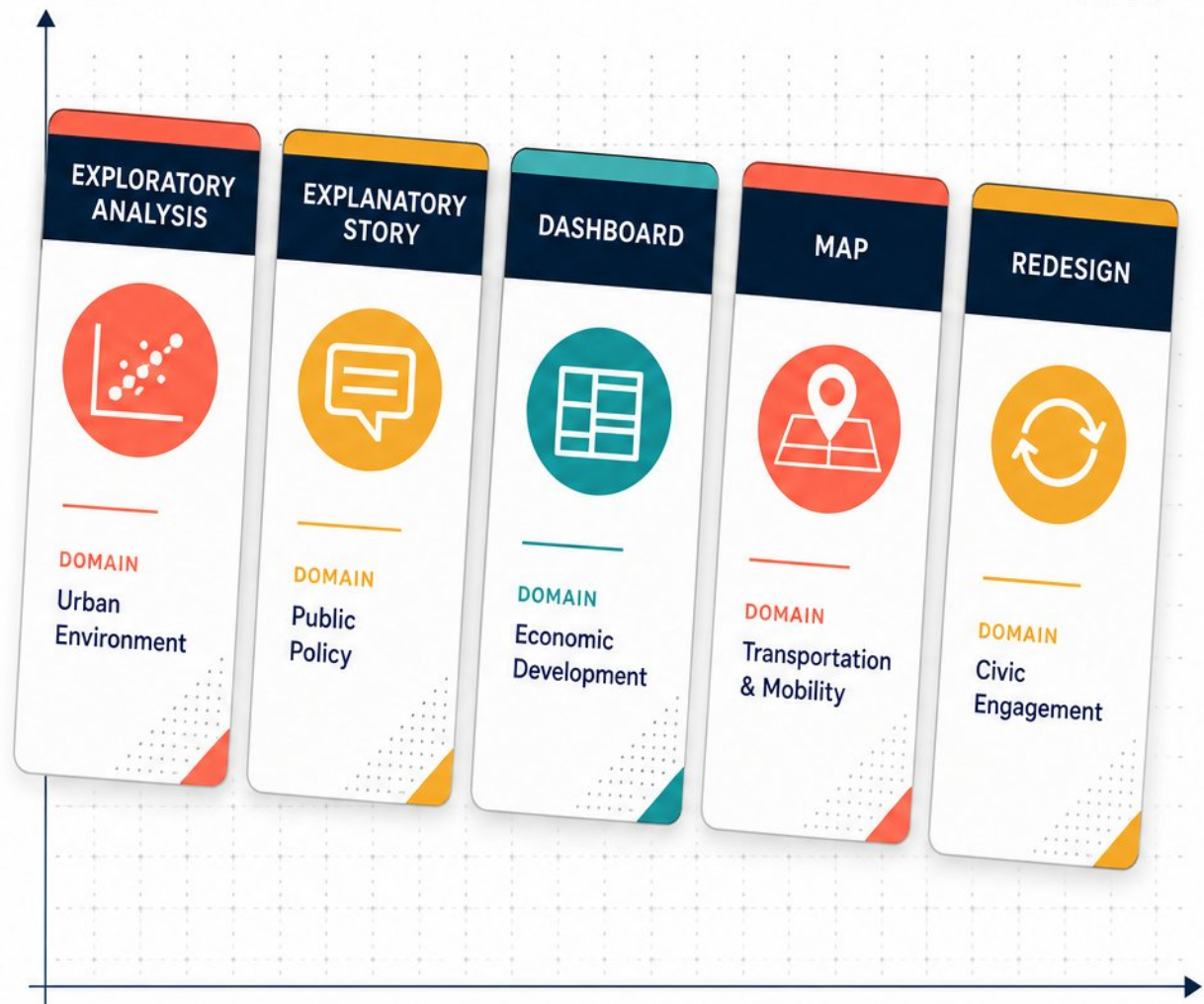


- One deliverable, tight question, bounded timeline per project



- Ready sources: World Bank, FRED, NYC Open Data, Kaggle, city permits

EXAMPLES: CANDIDATE PORTFOLIO PROJECTS



A Reproducible Workflow from Raw File to Chart



- Reproducibility is a portfolio artifact: reviewers must rerun key results



- Separate data, analysis, and outputs; number scripts for cleaning, EDA, figures



- Pin dependencies: uv.lock, renv.lock, requirements.txt—commit lockfiles, never gitignore



- Escalate isolation: virtualenv, renv or uv, then Docker or Nix containers



- Version control as lab notebook: commit working states, tag the results commit



- Document AI-assisted work: model name, version, prompt text, archived outputs



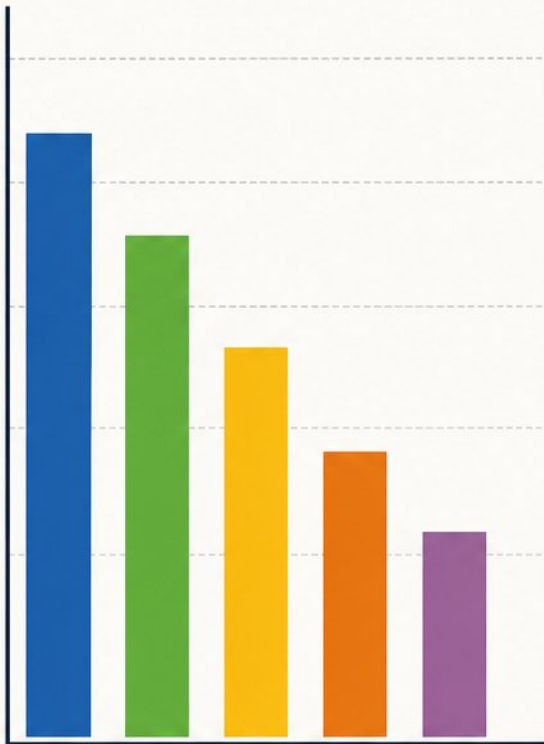
Charting Choices That Show Judgment

- Match chart type to the question being asked
- Color encodes a variable: sequential, diverging, or qualitative
- Never let hue carry meaning alone — add shape, dash, or pattern
- Label data directly; legends force eye round-trips
- Okabe-Ito and IBM palettes; viridis or cividis for sequential
- Dashboards need precision; narrative charts need hierarchy



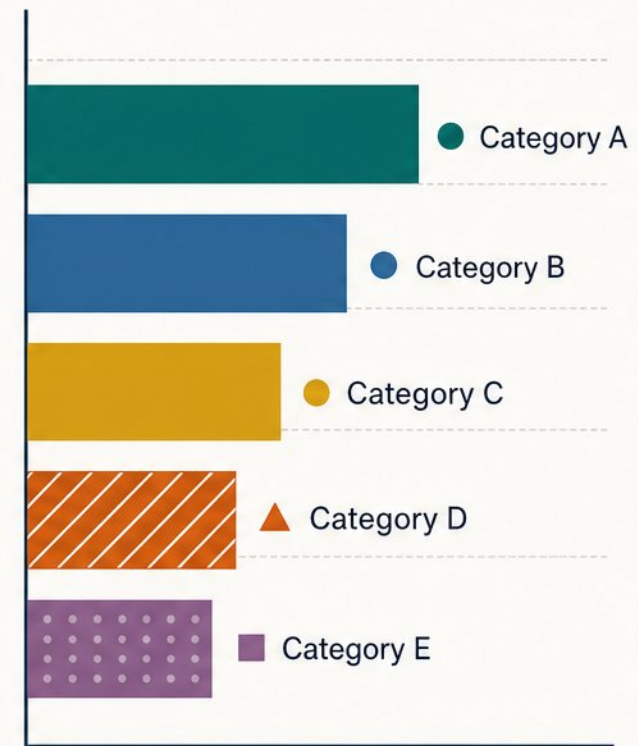
BEFORE

Harder to read and interpret



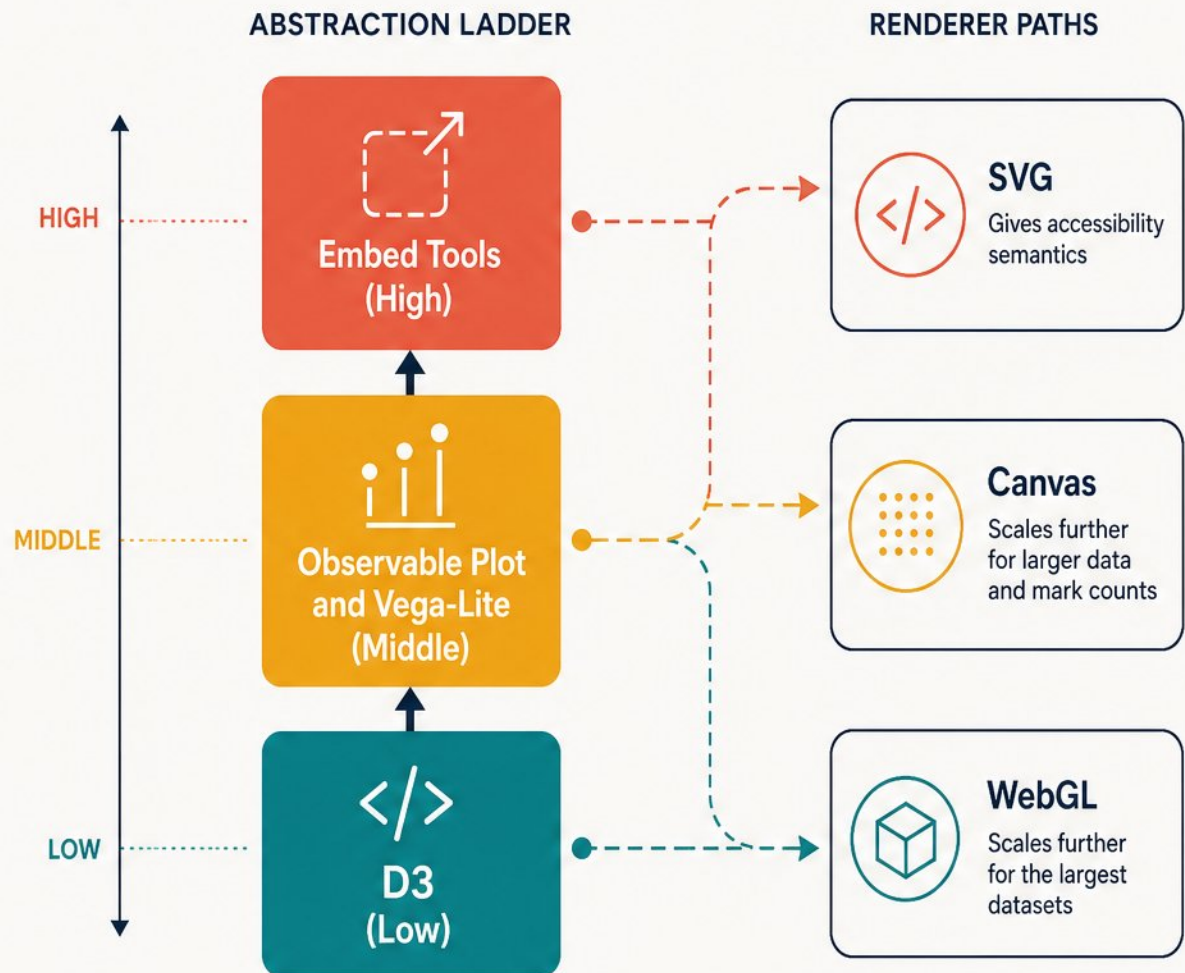
AFTER

Easier to read and interpret



Interactive and Web-Native Visualizations

- Interactivity adds value only when it changes understanding or decisions
- Core patterns: hover detail, filtering, brushing, scrollytelling
- Abstraction ladder: D3 low, Observable Plot and Vega-Lite middle, embed tools high
- Pick renderer first: SVG gives accessibility semantics; Canvas, WebGL scale further
- Mind mark count, data size, mobile behavior, and bundle size
- Ship sensible defaults, empty states, keyboard access, and mobile fallbacks



Accessibility as a Baseline, Not a Bolt-On



- WCAG floors: 4.5:1 normal text, 3:1 large text and data marks



- Never let hue carry meaning alone: pair color with shape, dash, pattern, or direct label



- Only SVG and DOM expose accessibility semantics for free above that ceiling, summarize marks



- Chartability: 14 heuristics in 20-40 minutes across POUR plus Compromising, Assistive, Flexible



- Provide takeaway alt text plus a collapsible data table



- Contrast fails most audits: check text, marks, and focus indicators separately

DESIGN FOR PERCEPTIBILITY AND UNDERSTANDING



DATA TABLE ALTERNATIVE (COLLAPSIBLE)

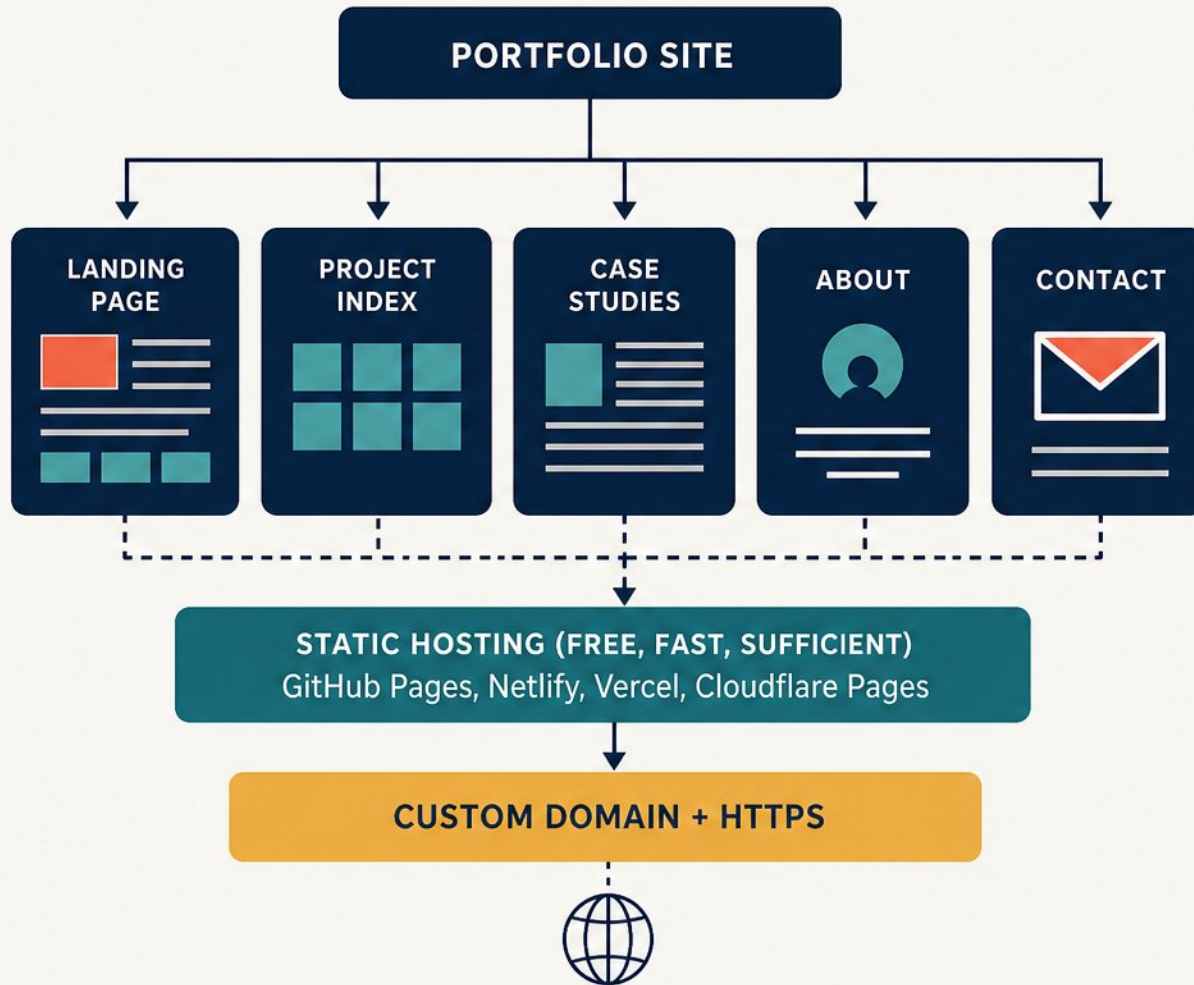
Bar	Color	Shape	Pattern / Dash	Description
●	Red	○	—	Red
■	Teal	□	//////	Teal
▲	Orange	△		Orange
◆	Teal	◇		Teal
⬢	Gray	⬢	~~~~~	Gray

Packaging Each Project as a Case Study

- Standard page flow: title, question, data, method, decisions, result, limitations, links
- Lead with the headline outcome; skimmers decide in seconds
- Descriptive headings carry the load, not generic titles like Research
- Show one honest rejected alternative and the tradeoff behind it
- Add screenshots, static fallbacks, and a tested local backup
- Credit role, collaborators, timeline, tools, sources, and licensing

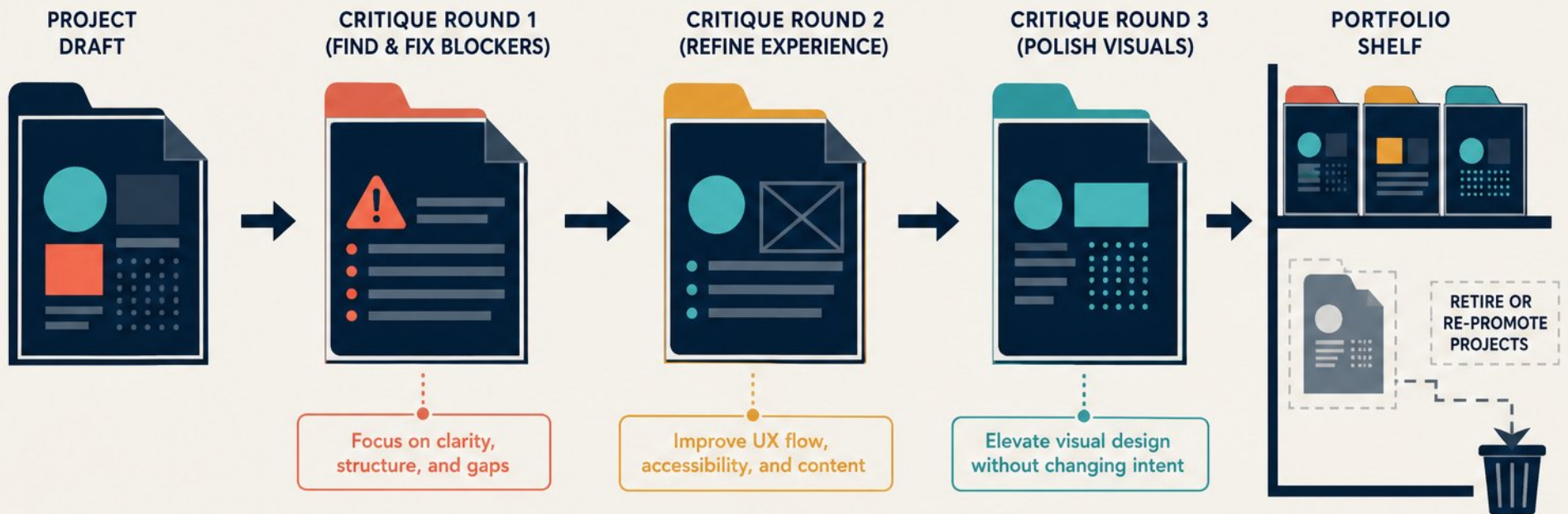


Building the Portfolio Site and Personal Brand



- Combine a personal site, hosted portfolio, or platform profile; don't pick just one
- Keep it lean: landing page, project index, case studies, about, contact
- Static hosting is free, fast, and sufficient; GitHub Pages, Netlify, Vercel, Cloudflare Pages
- Avoid free tiers that sleep: a 20-30 second cold start loses reviewers silently
- Buy a custom domain, verify HTTPS, and write tight summaries and a professional bio

Review, Feedback, and Iteration



DECISION LOG

Five audit dimensions: visual design, UX, accessibility, content, case-study depth

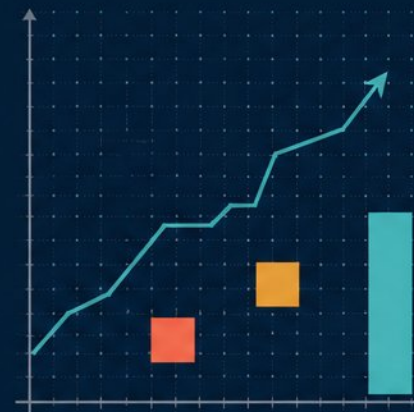
Fix order: clear first blockers before chasing visual polish

Ask peers, mentors, and target-role practitioners for structured critique

Missing outcomes and unclear personal contribution are the top failure modes

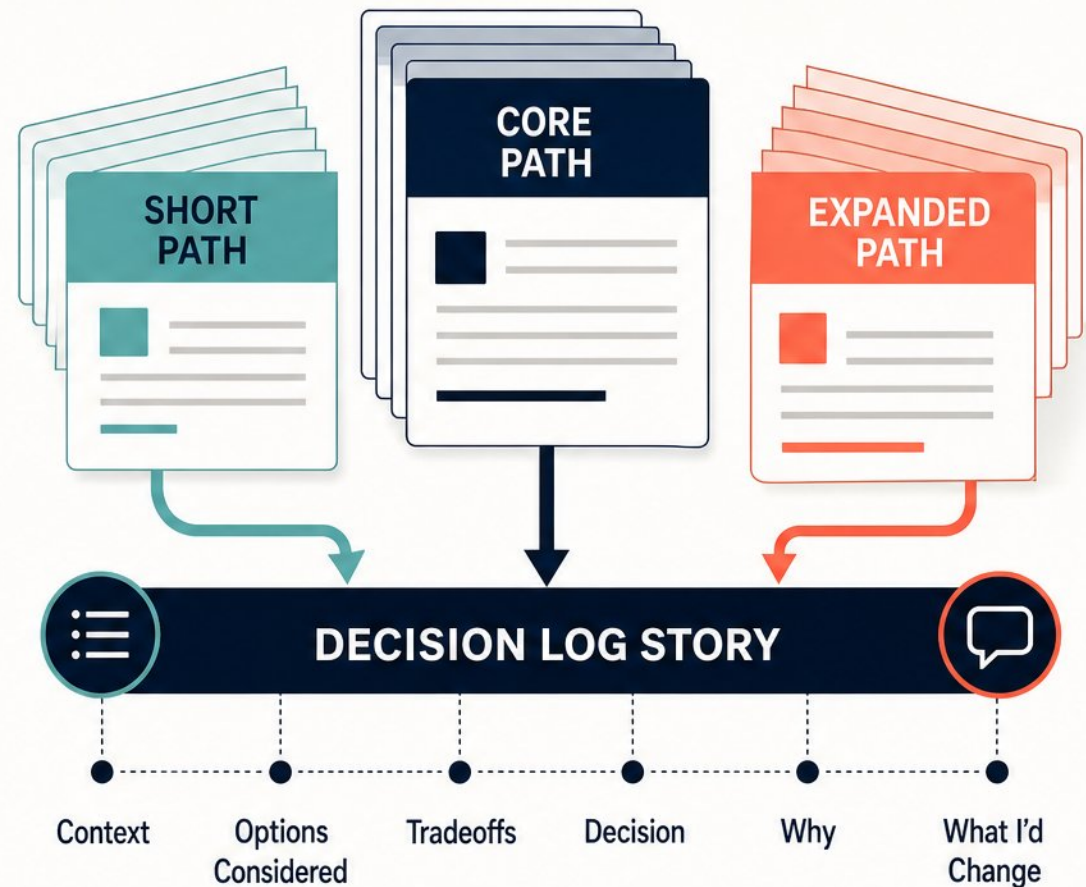
Revise without losing the project thesis; version the portfolio over time

Retire or re-promote projects; avoid over-polishing one piece



Presenting Your Work in Interviews and Reviews

- Presenting is a guided conversation about context, ownership, tradeoffs, craft
- Get the brief: time, projects, audience, format, rubric, accessibility needs
- Build a modular deck: short, core, and expanded paths for any timing
- Lead with the decision log story, not the dashboard; investigation sticks
- Answer hard questions honestly, and name what you would change now

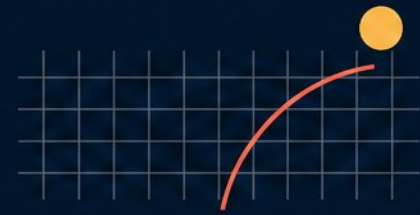


Tailoring the Same Portfolio to Different Audiences

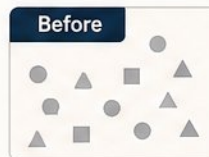
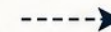
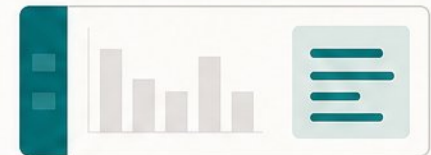
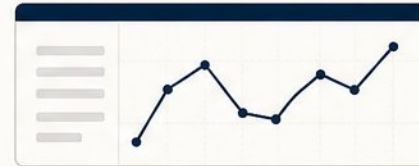


- Analytics and BI reviewers: business question, SQL evidence, adoption metrics, clear recommendation
- Newsroom editors: reported story, annotation craft, sourcing, speed of iteration
- Design and product teams: hierarchy, interaction craft, accessibility, rejected options explained
- Research and academic reviewers: reproducibility, provenance, method transparency, defensible statistics
- Adjust project order, framing, method depth, and call to action per audience
- Keep one portfolio, three entry points: summary, method, code

Common Portfolio Mistakes and How to Avoid Them



- Tutorial reproductions and overused datasets prove plotting, not messy-data skill
- Dashboards without a recommendation answer no "so what"
- Static screenshots only; links behind permission walls or paid software
- No before-and-after, no rejected alternatives; decision criteria invisible
- Failing cheap checks: contrast, alt text, keyboard access, mobile text
- No recent work; keep at least one project from the past few months



Your 30-Day Action Plan and Next Steps



- **Weeks 1-2:** pick 3-5 projects, write one-sentence question and audience each
- **Weeks 2-4:** build two strongest end to end, keep decision logs, run Chartability audit
- **Weeks 4-6:** package case studies, launch on static hosting with custom domain

- **Weeks 6-8:** seek structured critique, revise in fix order, rehearse short/core/expanded paths
- **Keep momentum:** 90-day cadence, community, talks, open-source contributions
- **Final self-check:** could a non-data reviewer grasp your problem from the summary alone?

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

personwise.ai/t/7f2c1de9/public