Designing for Depth

Information Architecture Strategies in Large Drupal Sites

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Sr. Product Owner

Sandstorm Design

DrupalCon
Chicago 2026

Fun facts about Sandstorm®

Acquia Community Partner

Drupal Certified Partner — Silver

Accessibility-certified, creative technology agency for 25+ years for **purpose-driven brands**

Deep expertise with **Associations, Global Non-Profits, Higher Ed & Healthcare**

Acquia CERTIFICATION

Certifications:
CPACC (accessibility), AWS Cloud, Pantheon, Acquia, Drupal, DEIB, and WBENC (women-owned)

15+ yrs working **in Drupal**

Acquia CERTIFIED CLOUD PRO

Interdisciplinary team: UX, UI, AI, strategy, technology, analytics

UX practice started by **Ph.D in human factors** in 2006

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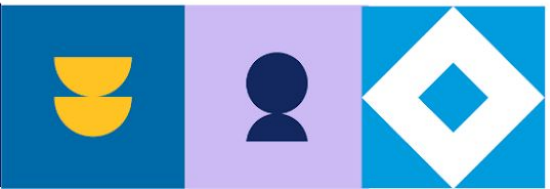
Today We'll Cover

- Project snapshots
- How user research drove content strategy
- Information architecture as a foundation for good user experience
- Using Drupal's strengths to manage a complex site architecture



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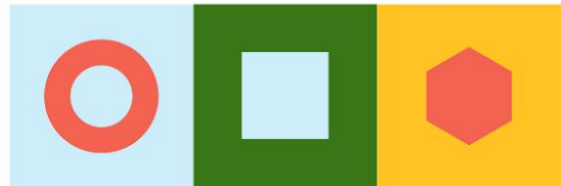

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The Marine Biological Laboratory (MBL) is a **nonprofit research and education institution** advancing biological discovery to better understand **life, the environment, and human health**.

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RESEARCH

Tell Us How You Really Feel

Who We Talked To

- Project Sponsors
- Content Editors
- Stakeholders
- End Users

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Everyone Relies on Search!

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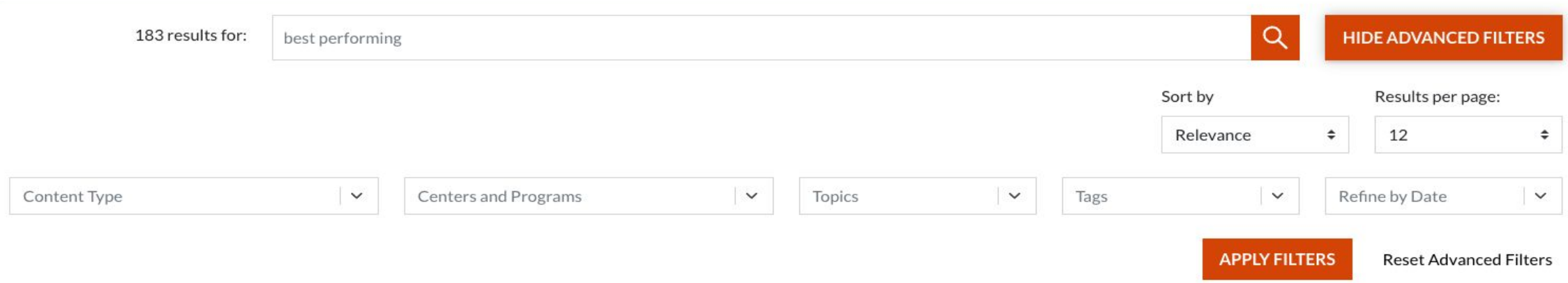
But if the experience is inconsistent, and important functionality like **filters are hidden**, users **quickly lose trust.**



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Navigation Leaves Something to be Desired

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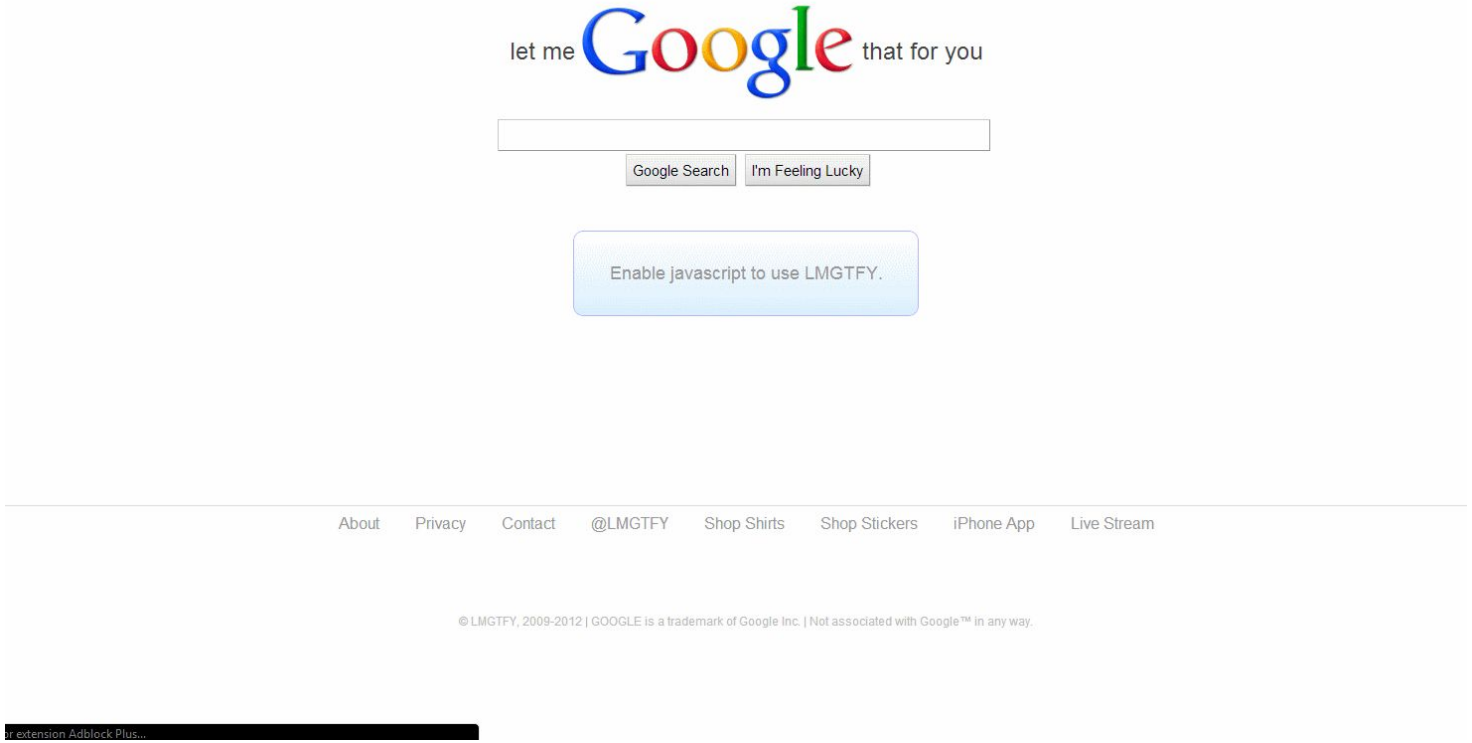
When users go to **Google or bookmarks** before your nav or site search…

it’s time for a change!



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Don’t Leave Me Stranded

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Users are used to finding content organized by topic.

Related content is a must — if they want more, let them have it!

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The Good News?

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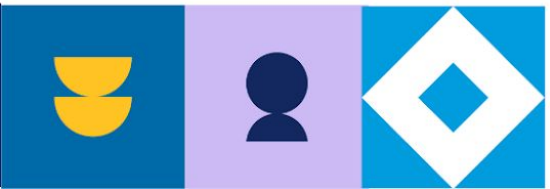
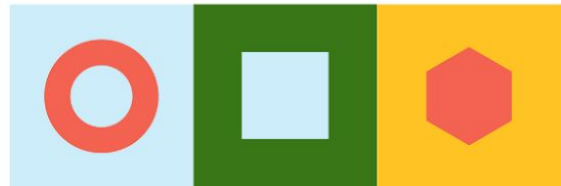
There's a taxonomy for that!

- Robust faceted search
- Sophisticated architecture strategy
- Strategic placement of "Featured" content or tags
- No dead ends





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INFORMATION ARCHITECTURE

Measure Twice (Migrate Once)

Using “Yes, And”

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Our new sitemaps needed to:

- Reflect **user-confirmed priorities**
- Highlight the organization’s **focus areas** (and everything under them)
- Create a **hub for published content**

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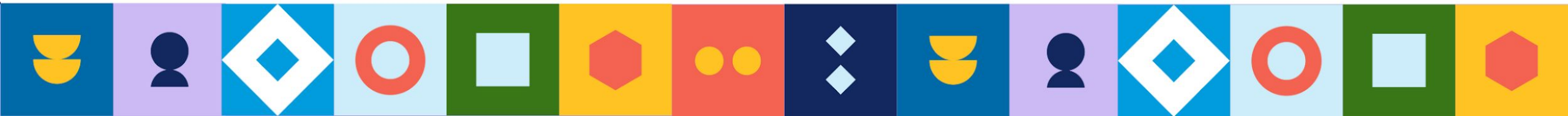

Audit and Inventory

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We documented it all:

- Current state sitemap
- Content types
- Taxonomies
- Paragraphs
- Media types

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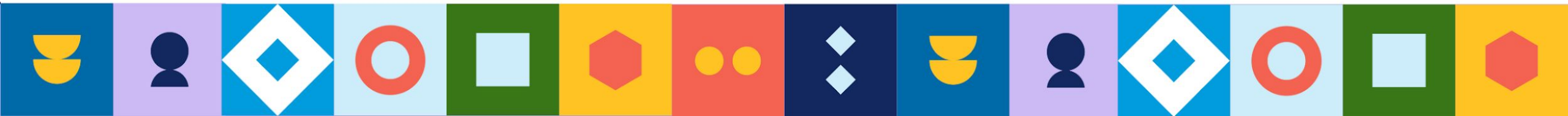


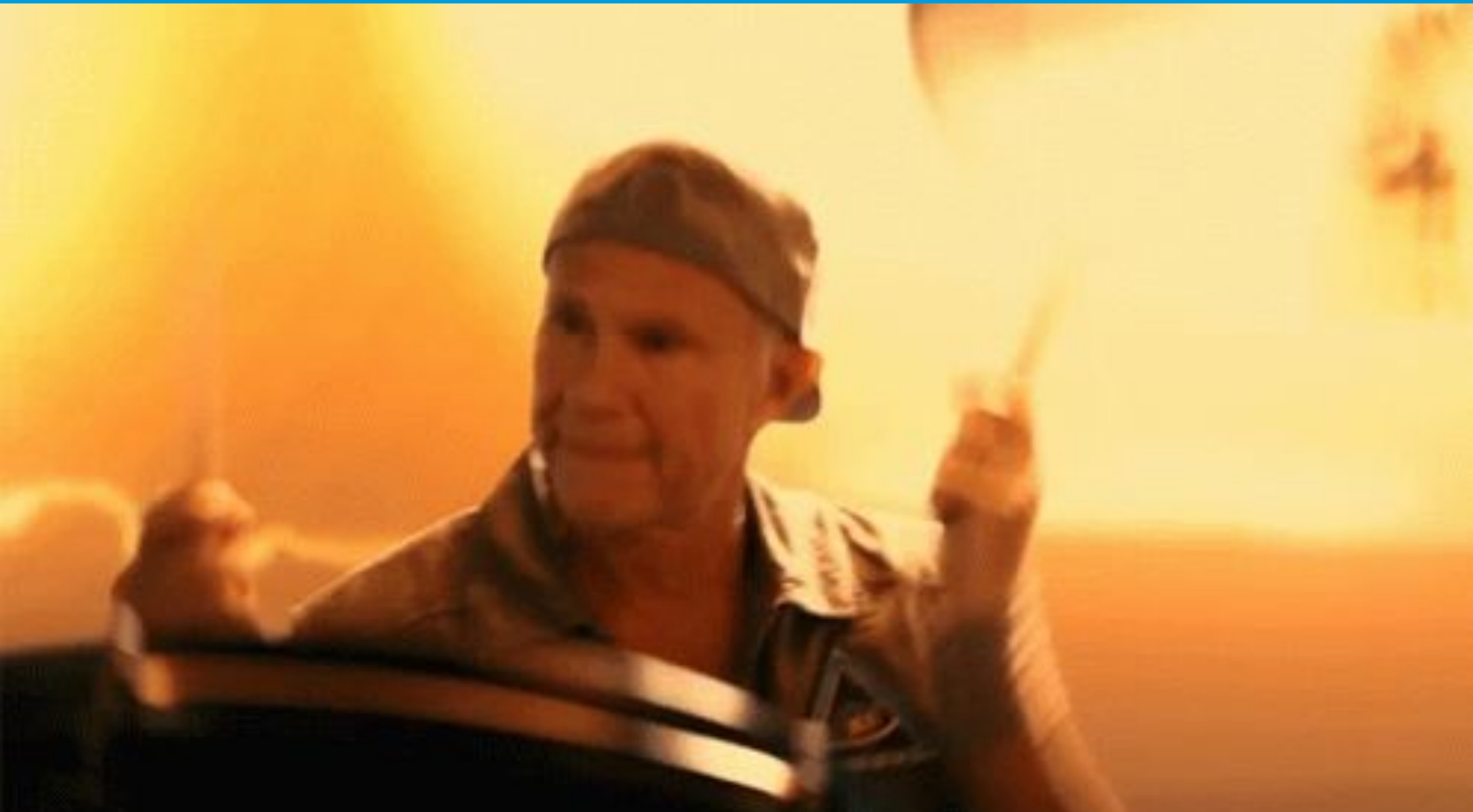
Gave It a New Home

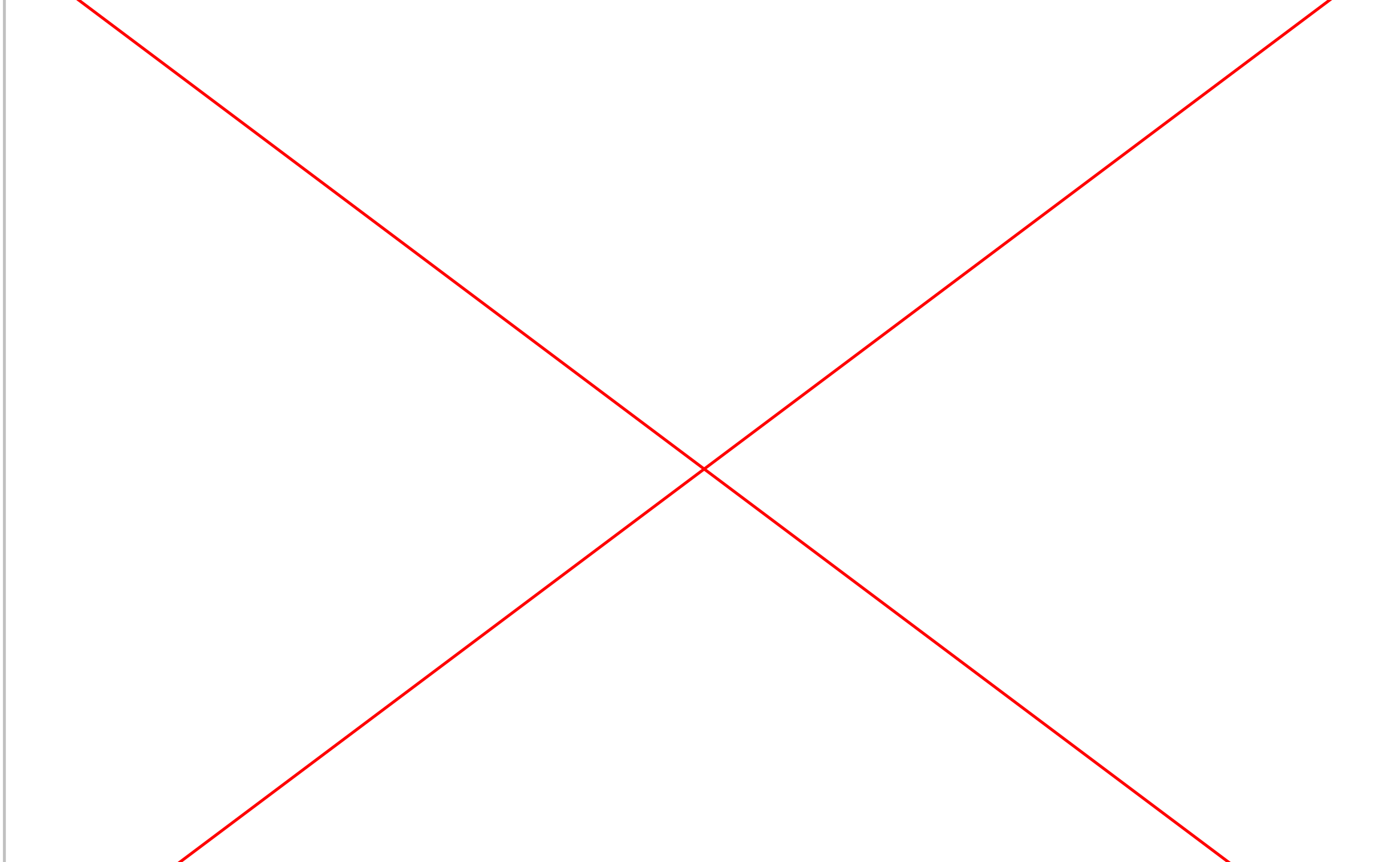
- Elevated the valuable content
- Gave major focus areas their due
- Kept a tidy utility nav

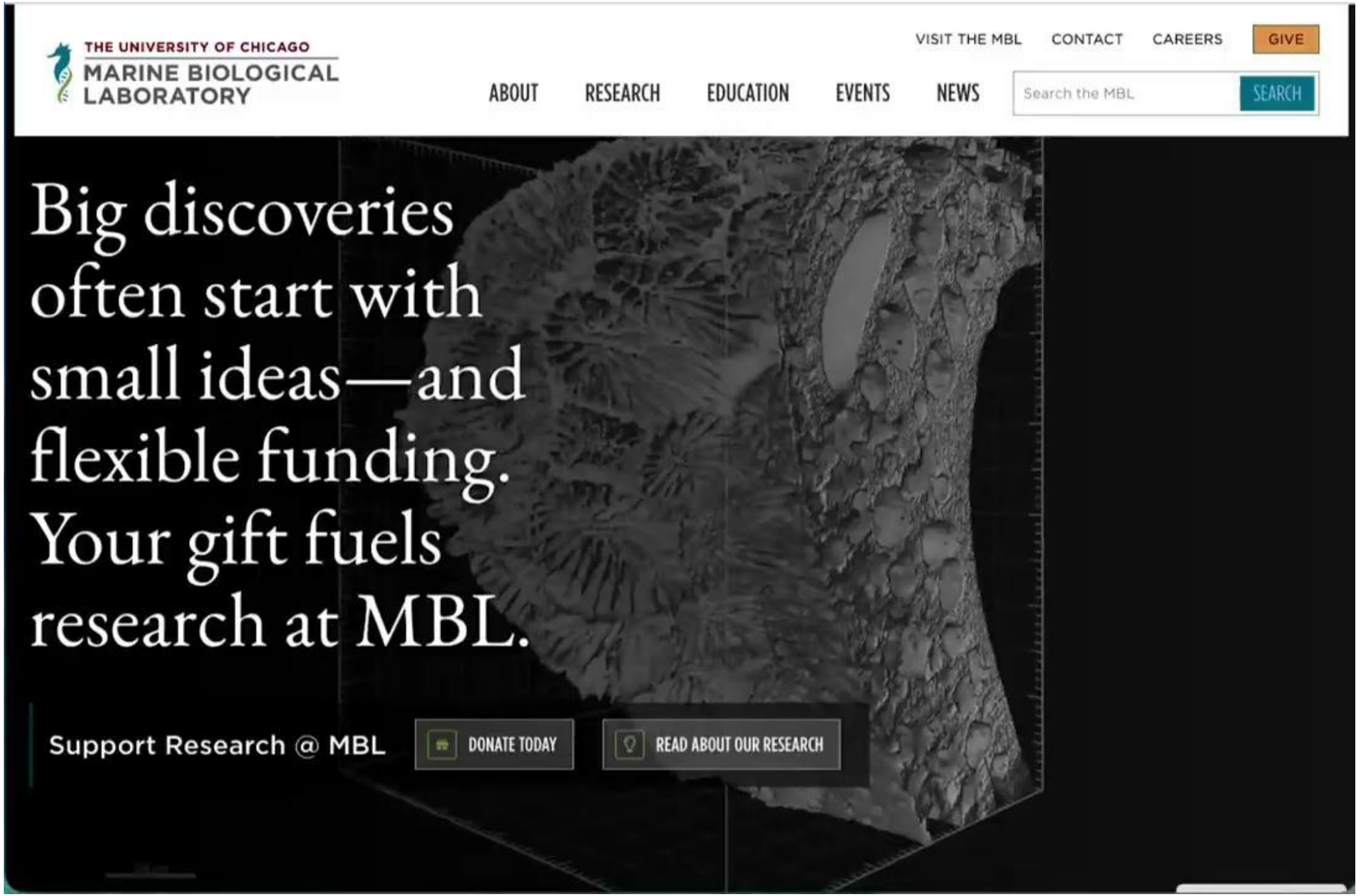
And a Fresh Coat of Paint

To mega menu, or not to mega menu?

- Evaluate content breadth & depth
- Reduce overwhelm
- Offer a path backward



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MIGRATION + TRANSFORMATION

Make the Magic Happen

Guiding Principles

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1/
Keep what can be repurposed

2/
Be selective with new content types

3/
Be kind to your content admins

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1 Taxonomy Strategy

Taxonomies can become overwhelming and duplicative

- Round up **similar vocabularies**
- **Consolidate:** remove duplicates, remove vague terms
- Transform: Update terms for accuracy, **nest**

Need an Arbitrator? **AI to the Rescue!**

- Begin with cleaned-up list
- Compare with high-priority SEO keywords
- Use AI to refine

The Result

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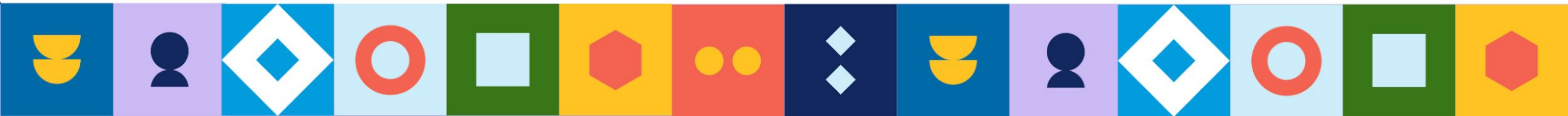
Condensed 17 vocabularies (11 unused) **to 6.**

Nesting vocabularies allowed us to accommodate volume AND specificity.

And set the groundwork for our related content needs.



2 Architecture Considerations

Consider the **Content Types**

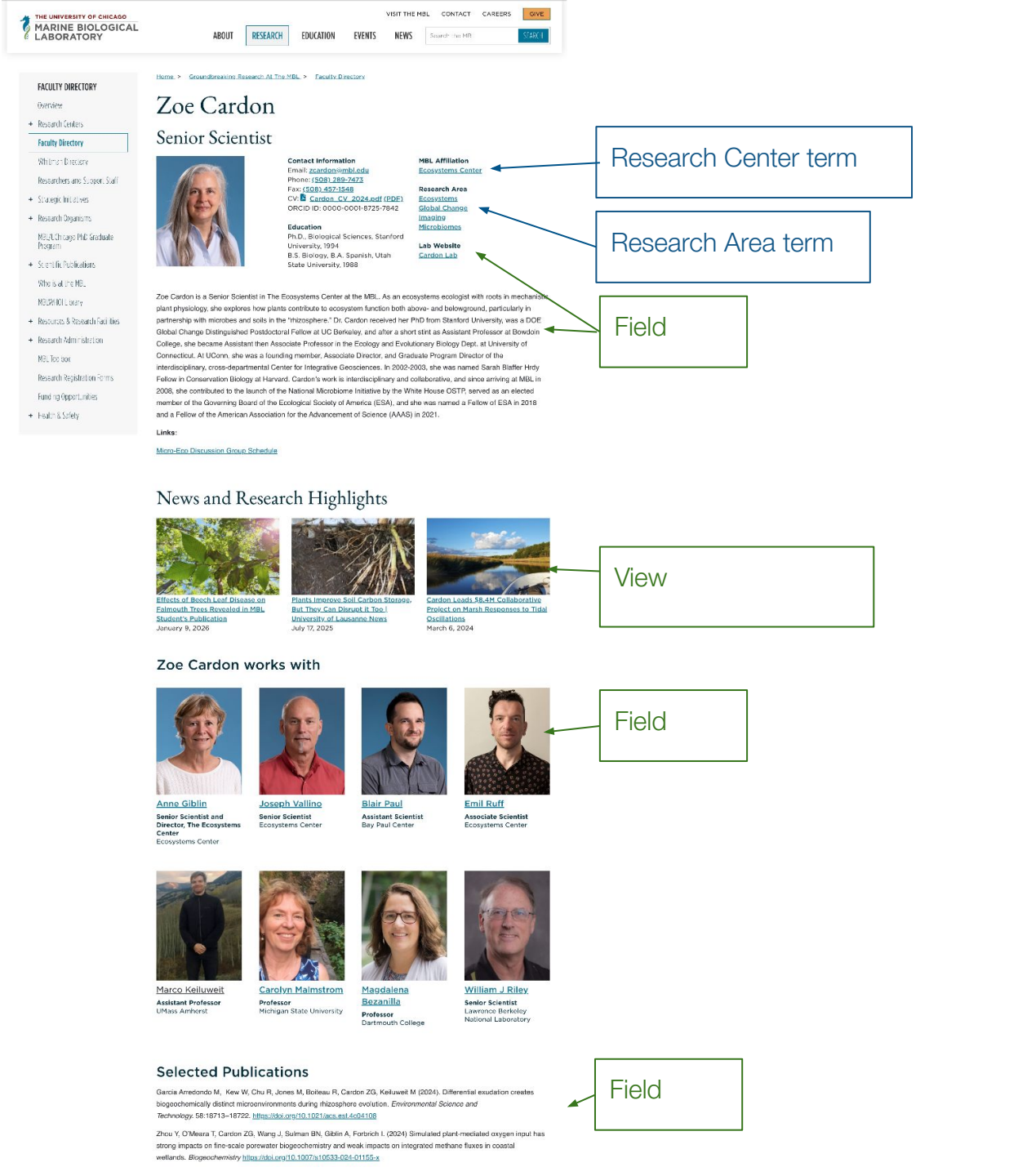
- **Reuse** where possible
- **Transform** where applicable
- **Migrate** when needed

Use **Structured Content** as the Workhorse

- 1 content type for 1,000s of (similar) nodes
- **Taxonomy-driven** everything
- Let the **fields** be the **outline** for editors

Give Editors a Map (Article)

Give Editors a Map (Person)



Leverage Taxonomy for Menus and Aliases

Root | Node | Term Level 1 | Term Level 2 | Title

milkeninstitute.org/content-hub/research-and-reports/reports/strengthening-private-markets-fueling-americas-economic-growth-and-global-competitiveness

Or Use the Menu to Help Lead the Way

< Back to Course Offerings

PHYSIOLOGY: MODERN CELL BIOLOGY USING MICROSCOPIC, BIOCHEMICAL AND COMPUTATIONAL APPROACHES

Overview

Course Faculty and Lecturers

Financial and Course Support

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2026 Physiology Schedule

Student Testimonials

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Physiology: Modern Cell Biology Using Microscopic, Biochemical and Computational Approaches

This course is at the forefront of new tools — molecular, computational, biophysical — as it prepares students to tackle emerging biological questions.

Cell Physiology | Microbiology

Course/Program Dates: Jun 15, 2026 - Jul 26, 2026

Application due date: Feb 09, 2026

APPLY FOR THIS COURSE

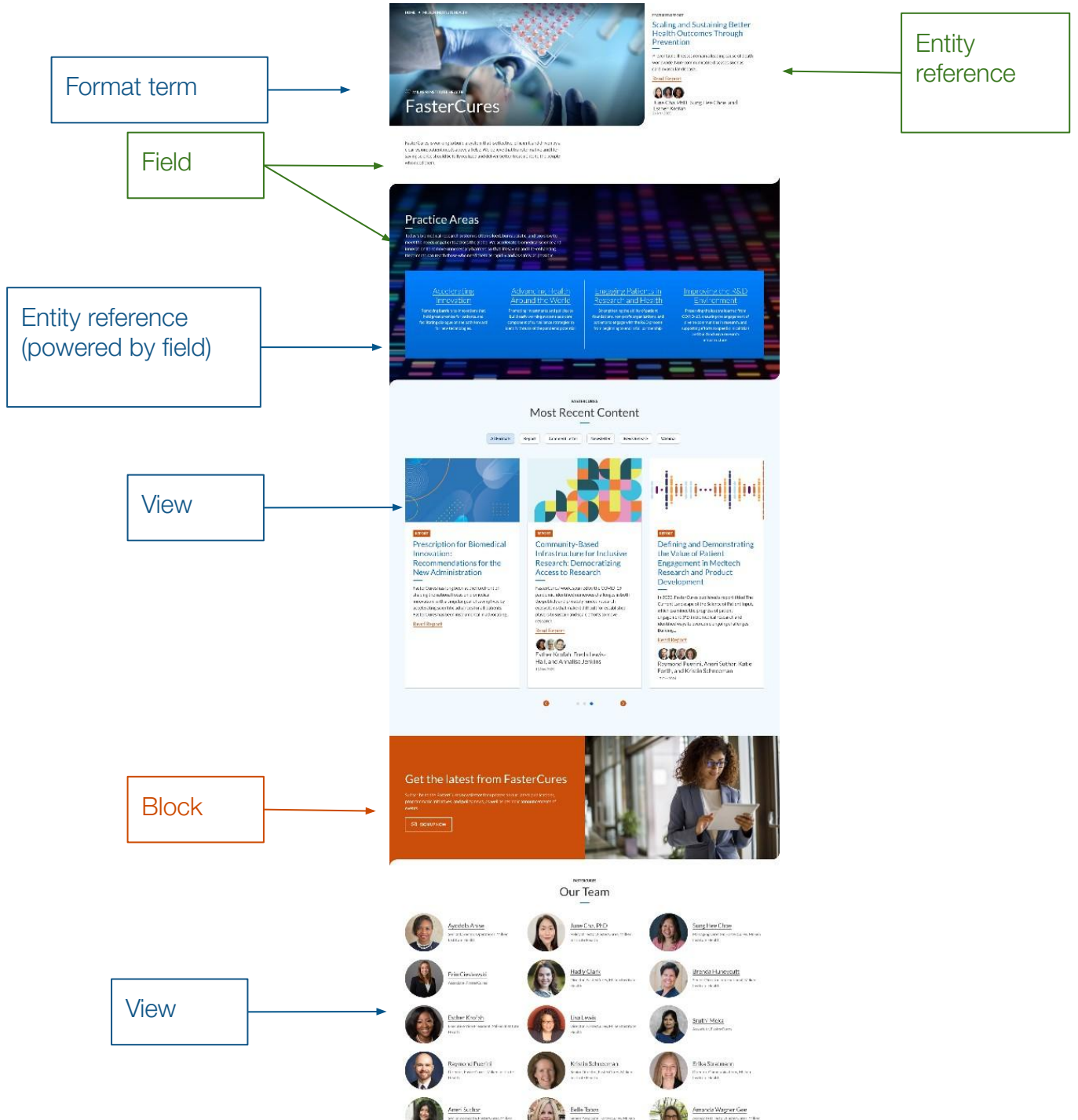
Directors: Cliff Brangwynne, Princeton University; and Amy Gladfelter, Duke University

Financial aid is available

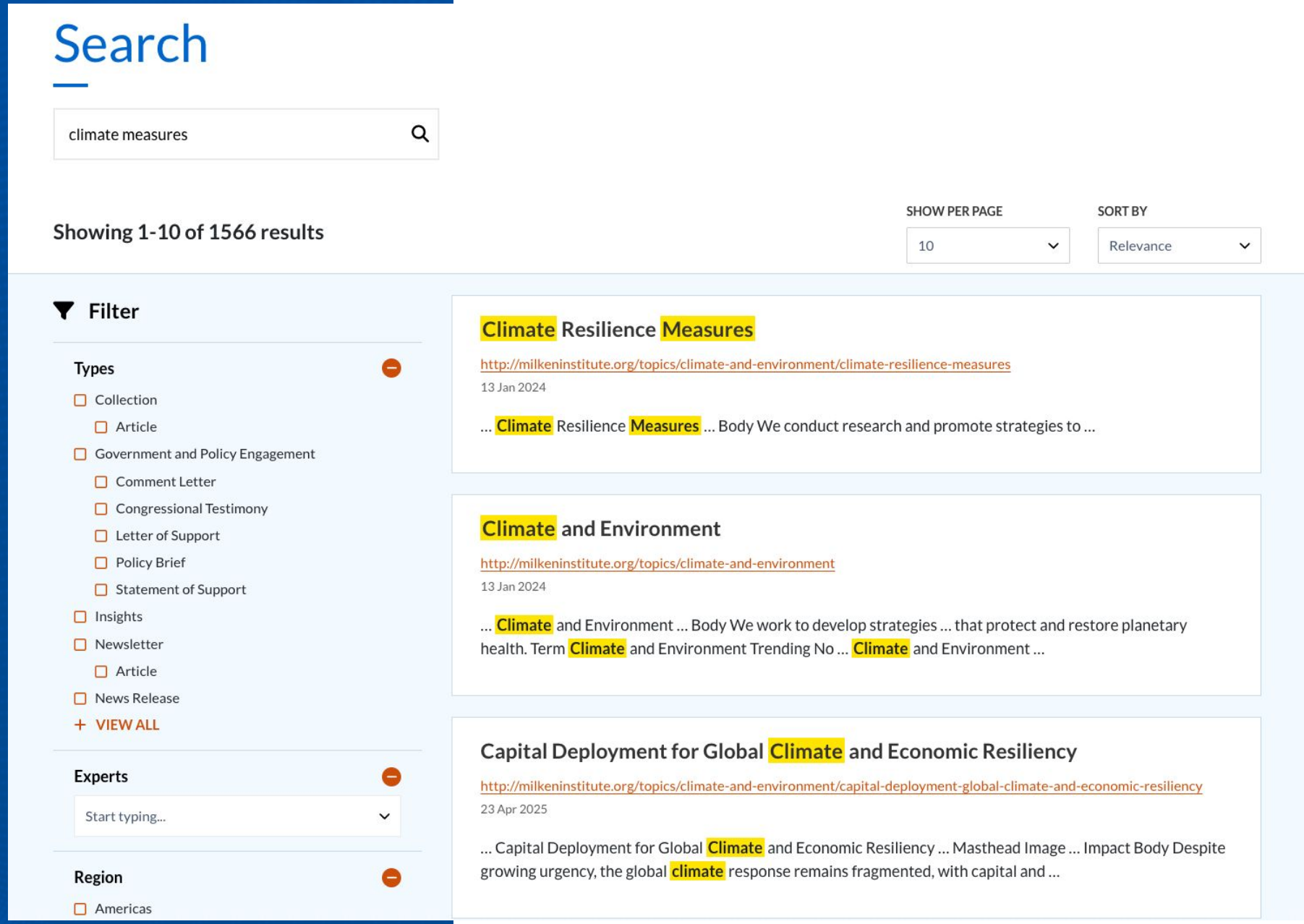
Set a **Default Layout** for Consistency

- **Layout builder blocks** for frequently-updated nodes
- **Reference available terms** to power views

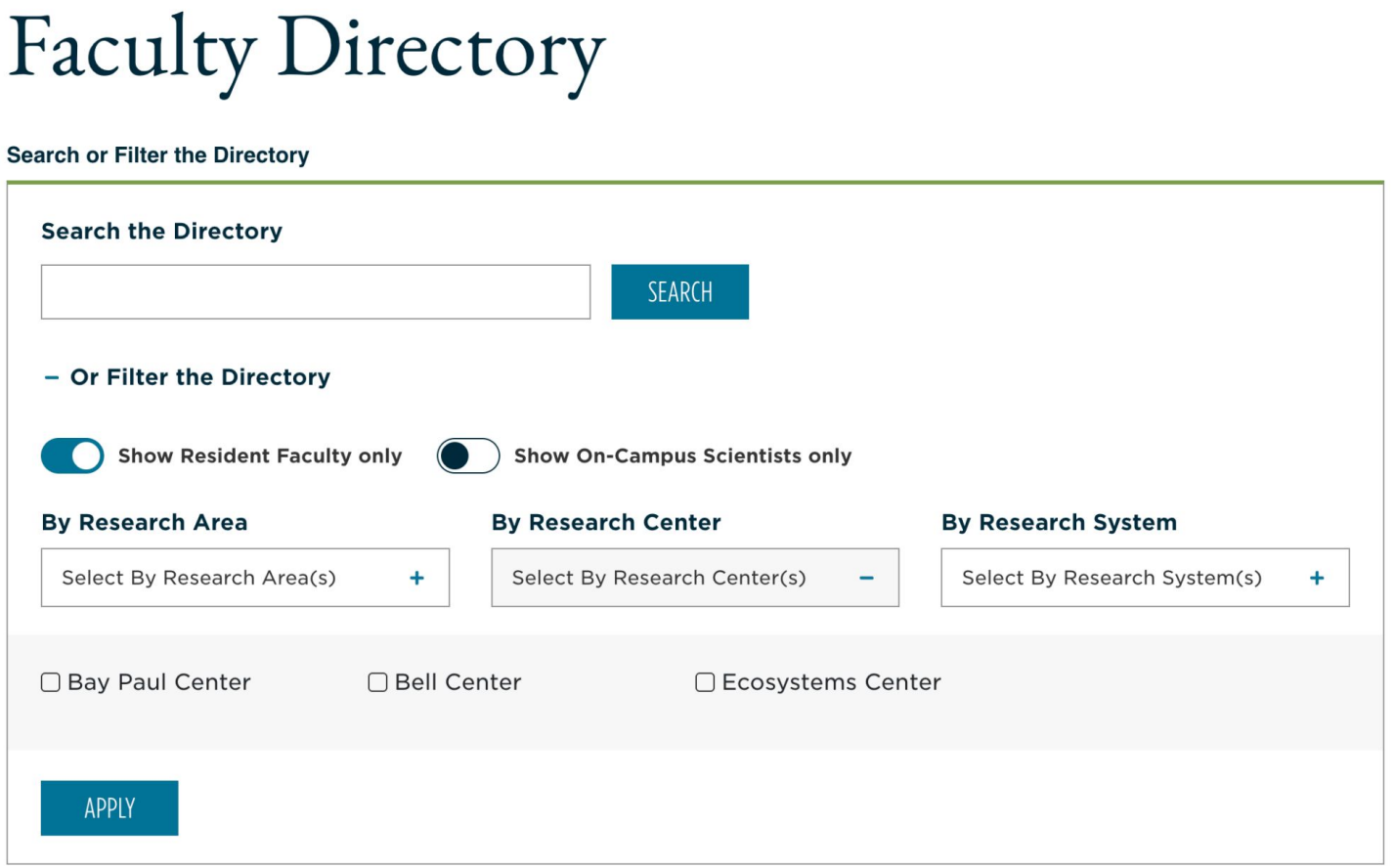
When Those Powers Combine...



It All Powers Search



...and Filtering



Takeaways

- **Start with research.** Findings will help ground future decisions.
- Invest time in **auditing and documentation.** It will save time in the long run and help catch some of those tricky edge cases.
- Think of **every page as a side door** to the website.
- Make sure the **content strategy is clear** and the **architecture supports it**.

Thanks for joining!

Let's Connect:

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I'd love your feedback!

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