

Revolutionizing development strategies

Crafting next-generation web software

Tara Bazler & Chris Basham

Indiana University has long been a leader in providing faculty, students, and staff with the most up-to-date technology support for teaching, learning, research, and administration.

<http://www.iub.edu/faculty/technology.shtml>

Though purchased and homegrown systems often represent the state of the art or best choice at the time of their selection, users' expectations continue to change as they desire newer technologies or more integration. It is difficult to back into improved user interfaces and integration with other systems after the fact.

—Empowering People

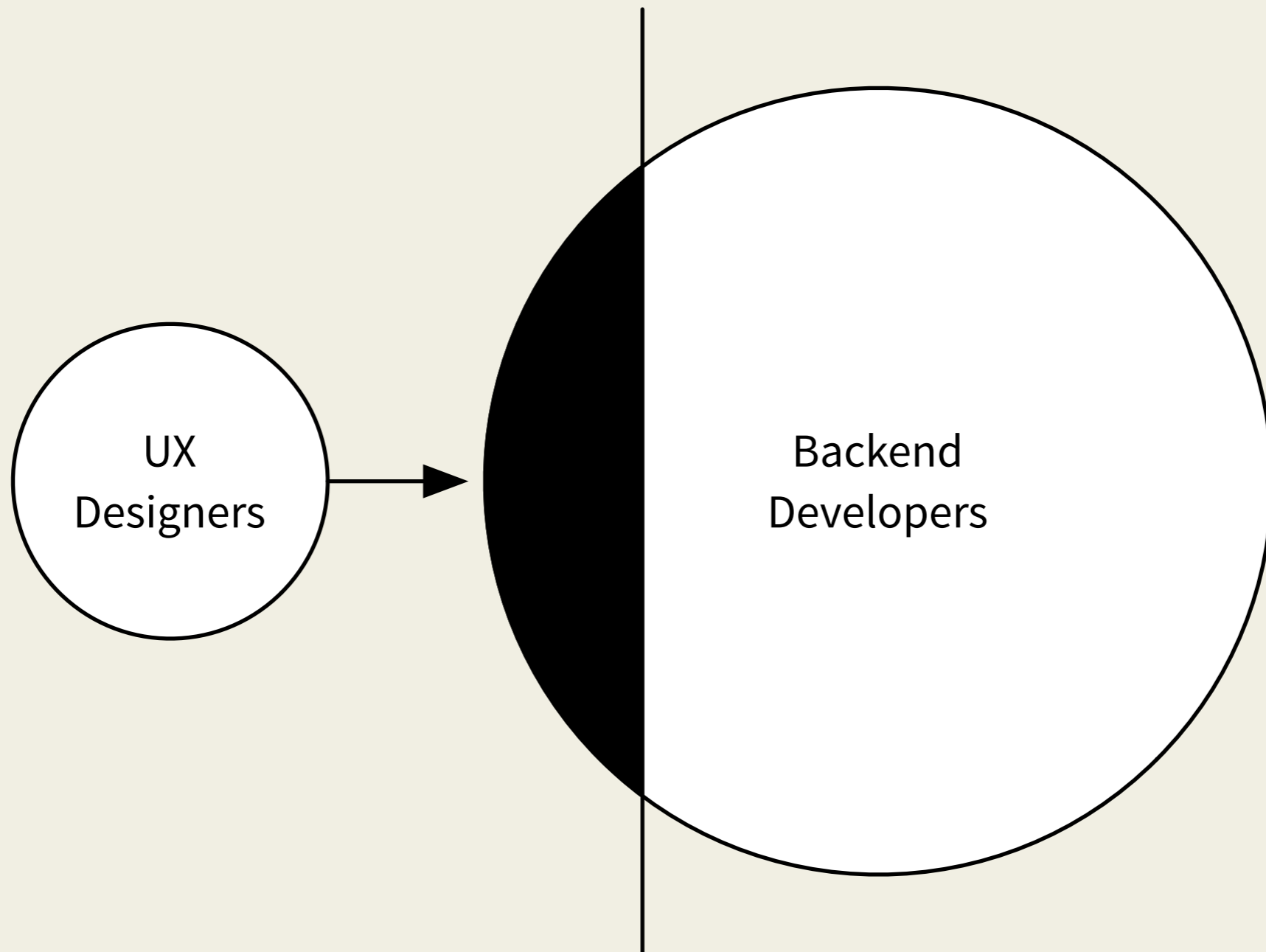
Indiana University's Strategic Plan for Information Technology 2009

Current work process

Developers,
the alpha & the omega

Over-the-fence
deliverables

Arbitrary walls of responsibility



In order to effectively design for today and tomorrow's Web, we must replace outdated design artifacts with real collaboration and communication.

For a lot of people, *this is scary...*

—Brad Frost

<http://bradfrostweb.com/blog/post/development-is-design/>

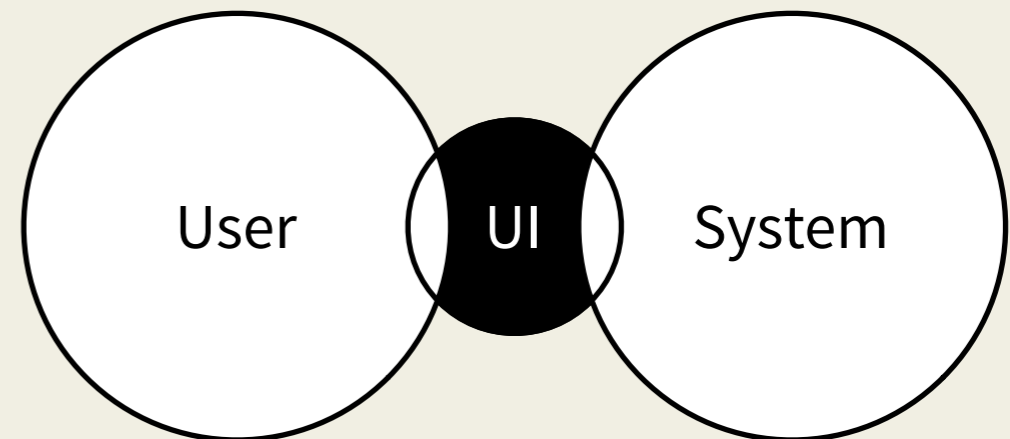
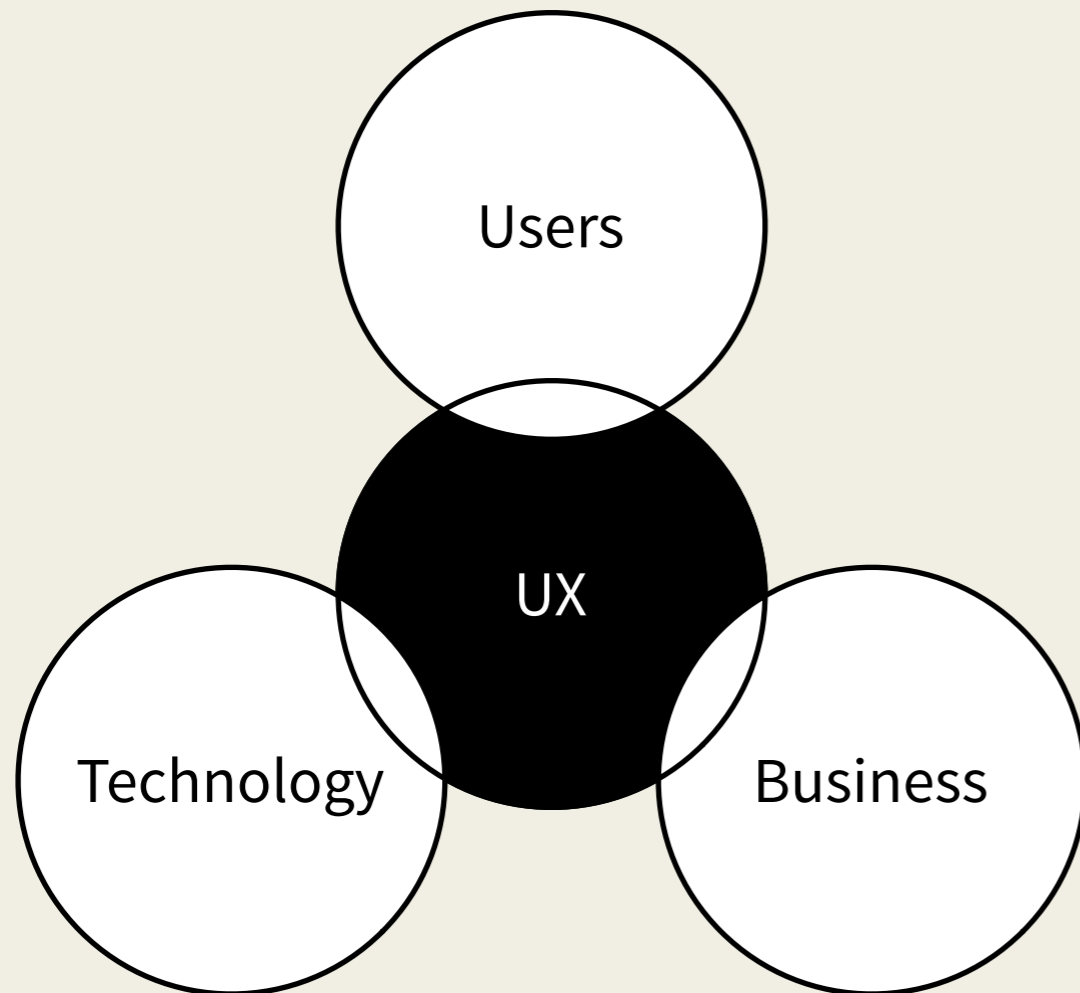
Proposed work process

Expectations

Assumptions

Common ground

UX verses UI



Design is more than decoration.
Development is more than plumbing.

—Cameron Koczon

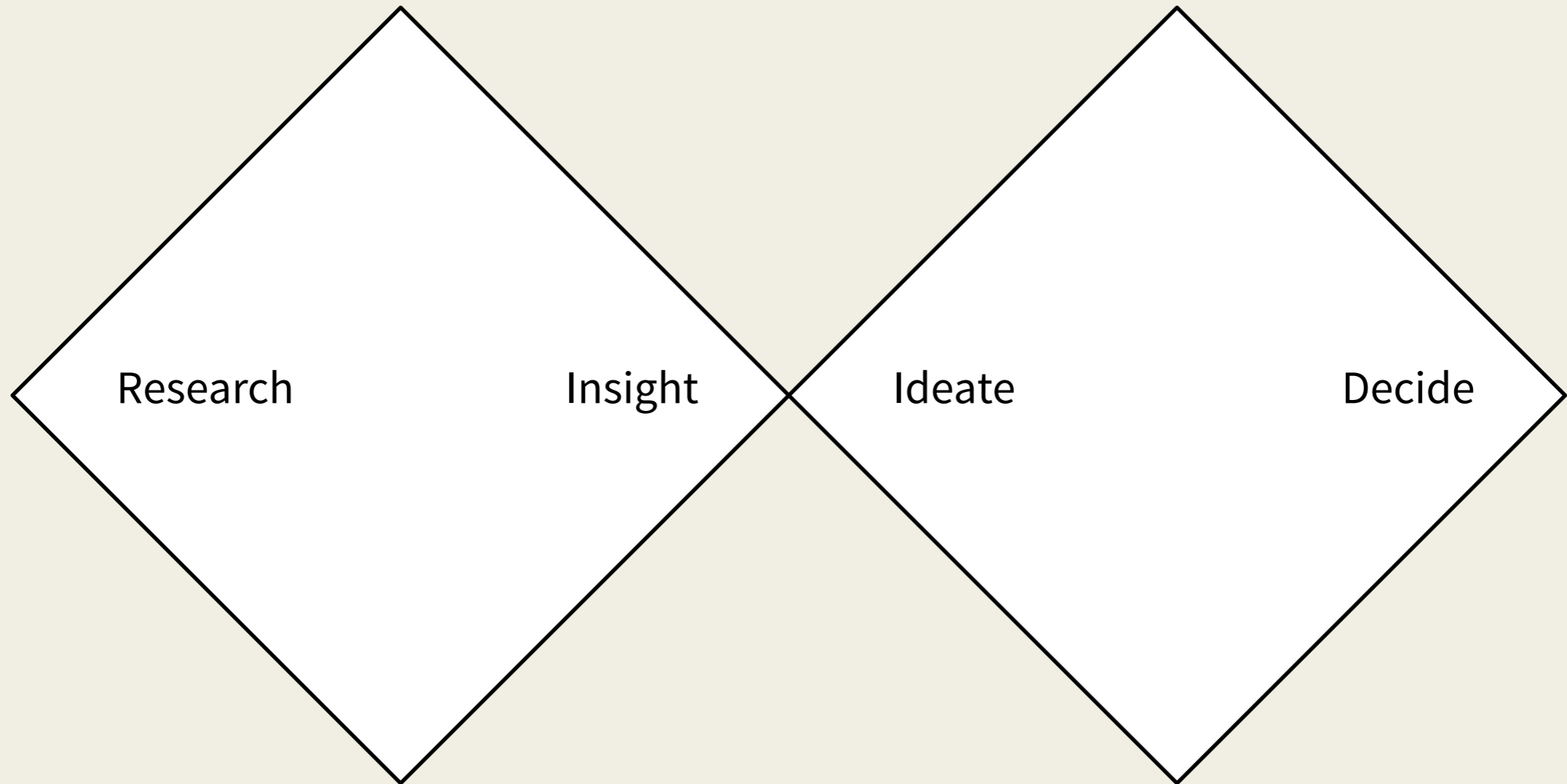
paraphrased from <http://alistapart.com/article/an-important-time-for-design>

Great developers are “designers” in their own domain. Design can even be our common thread, uniting two groups with a shared love of detail, craft, and building things.

—Cameron Koczon

<http://alistapart.com/article/an-important-time-for-design>

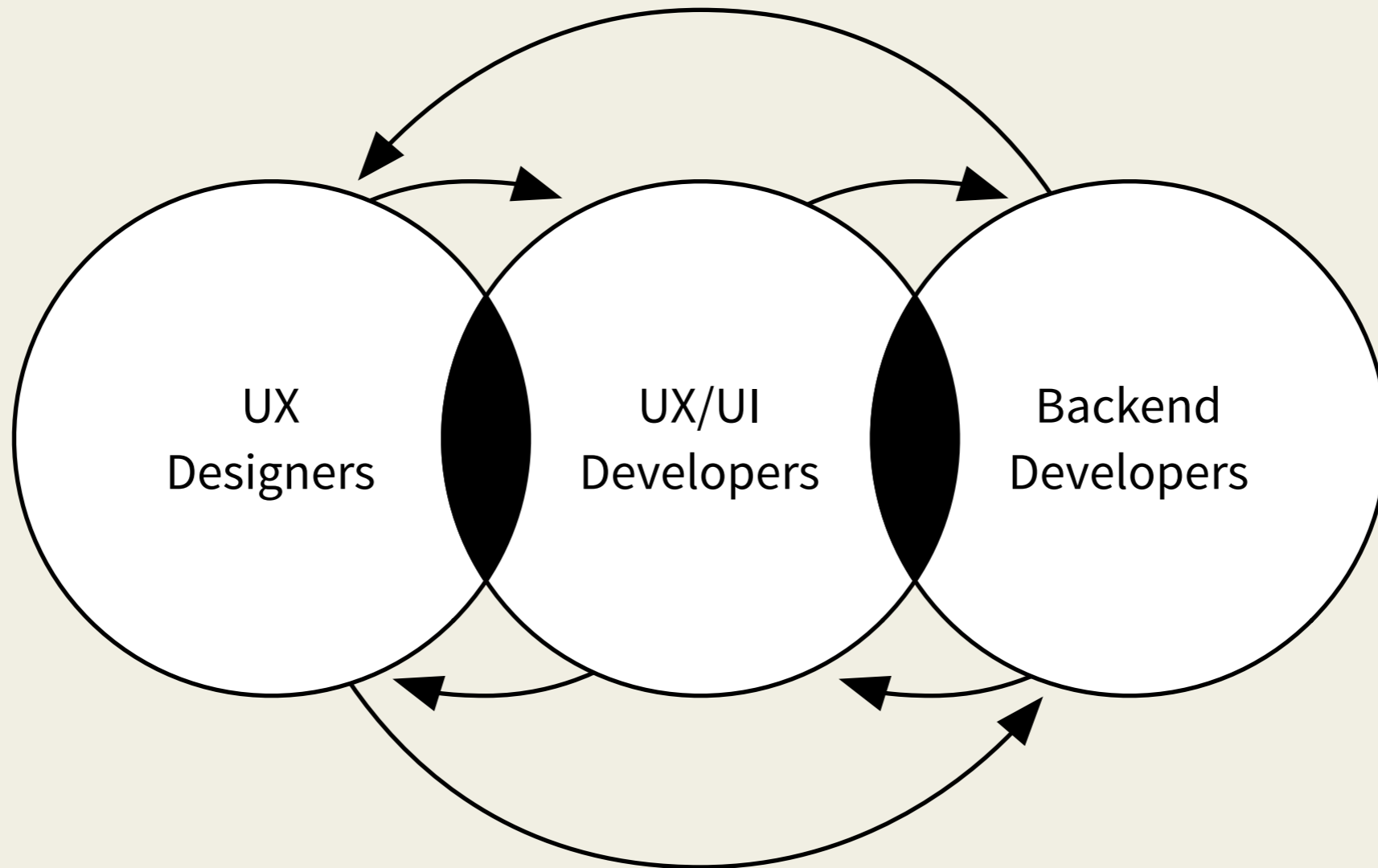
Design Process



Design is
insightful
intentionality

We design
together
to solve
human problems

Distributed responsibility



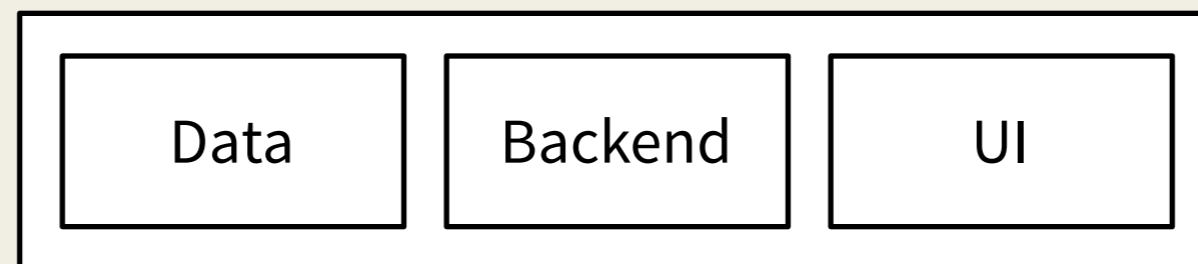
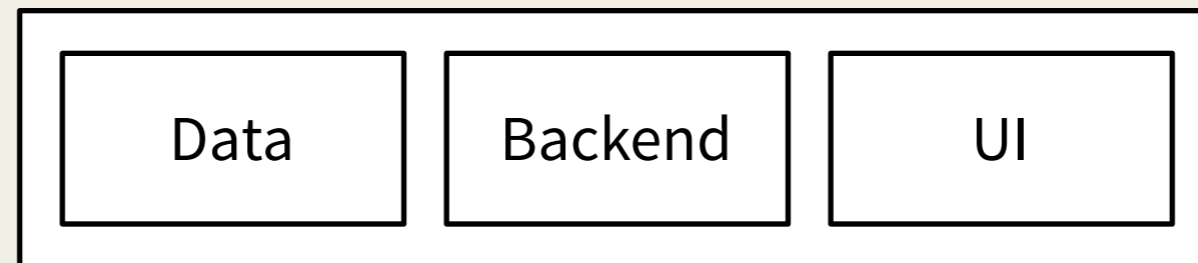
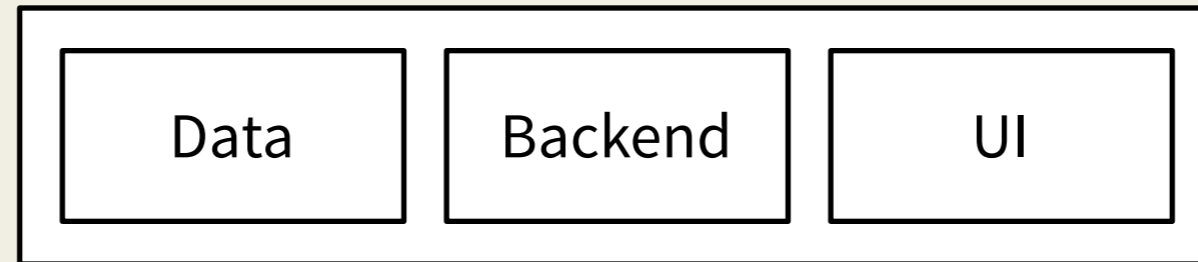
Front-end developers often exist in a weird purgatory, somewhere between the design world and the ultra-geek programming world. We serve as translators between these two worlds, and I feel it's our responsibility to bridge this chasm between design and development.

—Brad Frost

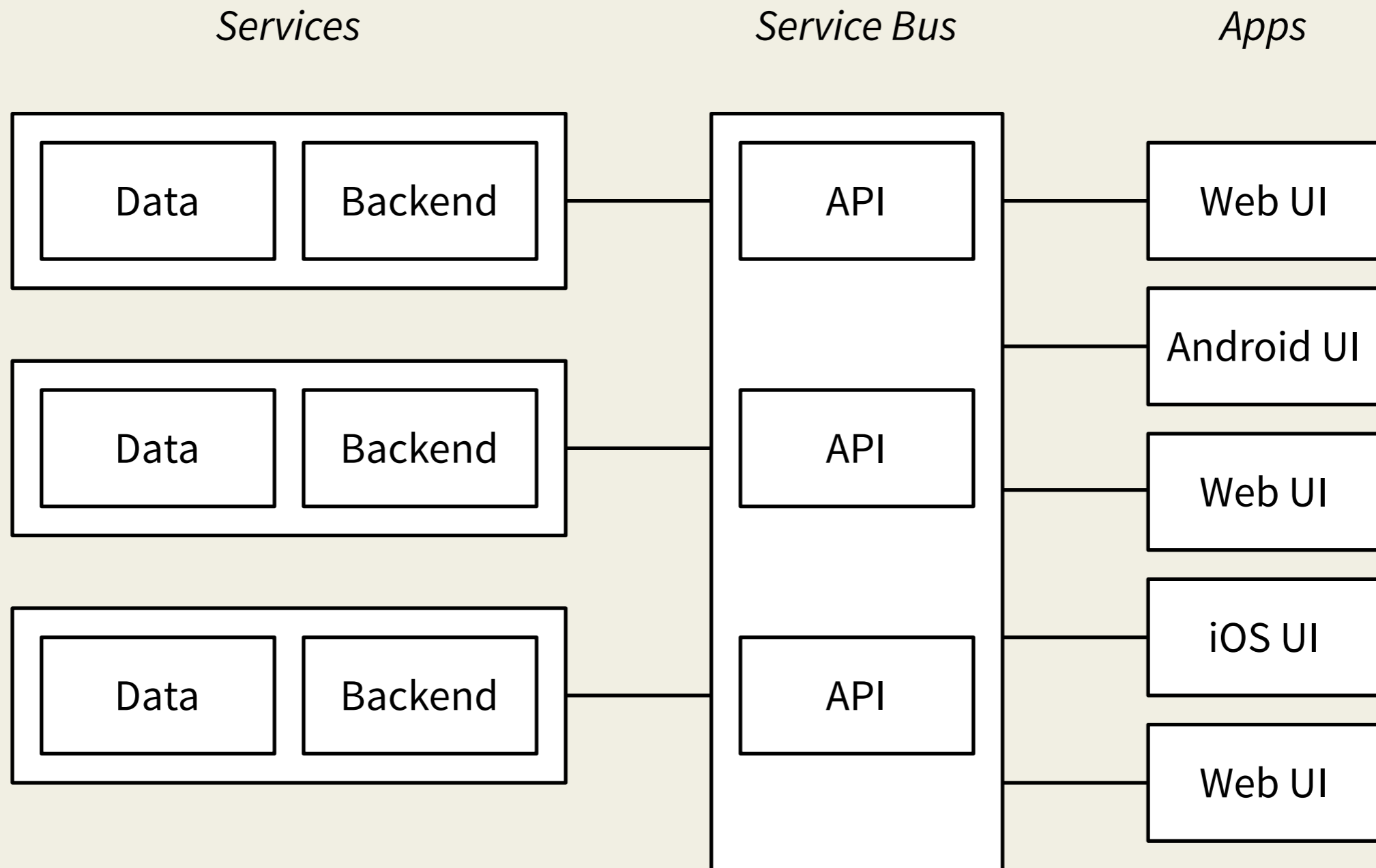
<http://bradfrostweb.com/blog/post/development-is-design/>

Kuali Student is
Agile

Current app architecture



Proposed app architecture



Action 40: To the extent practicable, IU should adapt current systems and require new systems to work effectively with a multitude of commonly used devices.

—Empowering People

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The best user interfaces usually arise from teams who are able to focus on less to go deeper into details.

—Lucas Rocha

<http://thelayout.cc/on-scope-and-time/>

Benefits

- More focused roles
- UI is not an afterthought
- Better user experience
- Less support contacts
- Non-disruptive technology upgrades
- Student/external partnerships

Moving forward

Action 38: IU should ensure that any system developed, acquired, or being revised maximizes usefulness, perceived ease of use, flexibility, and aesthetic appeal to the greatest extent possible.

—Empowering People

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Obstacles

- Change is scary
- Upfront cost
- New skill sets & roles
- Communication is difficult
- Braving how it should be done

Next steps

- We don't have all the answers
- Collaborate & communicate across disciplines
- Challenge the status quo

Be a snowflake that takes
responsibility for an avalanche.

—Sharlene King

<http://stemmings.com/snowflakes-avalanches/>

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Process Experience Architecture

Indiana University

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