

# Building better apps: The role of the UI developer

Tara Bazler • Chris Basham

# CHALLENGES OF WEB DEVELOPMENT

## DEVICES WITH BROWSERS

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Desktop

Laptop

Phone

Tablet

TV

Game console

E-reader

# TYPES OF BROWSER INTERACTION

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Keyboard

Mouse

Screen readers

Touch

Gesture

Voice

# DEVICE CAPABILITIES

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**Location**

**Orientation**

**Notifications**

## UPCOMING DEVICE CAPABILITIES

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<b>Connectivity</b>	<b>Ambient light</b>
<b>Contacts</b>	<b>Proximity</b>
<b>Battery status</b>	<b>Camera</b>

**Native apps have known  
device & software features.**

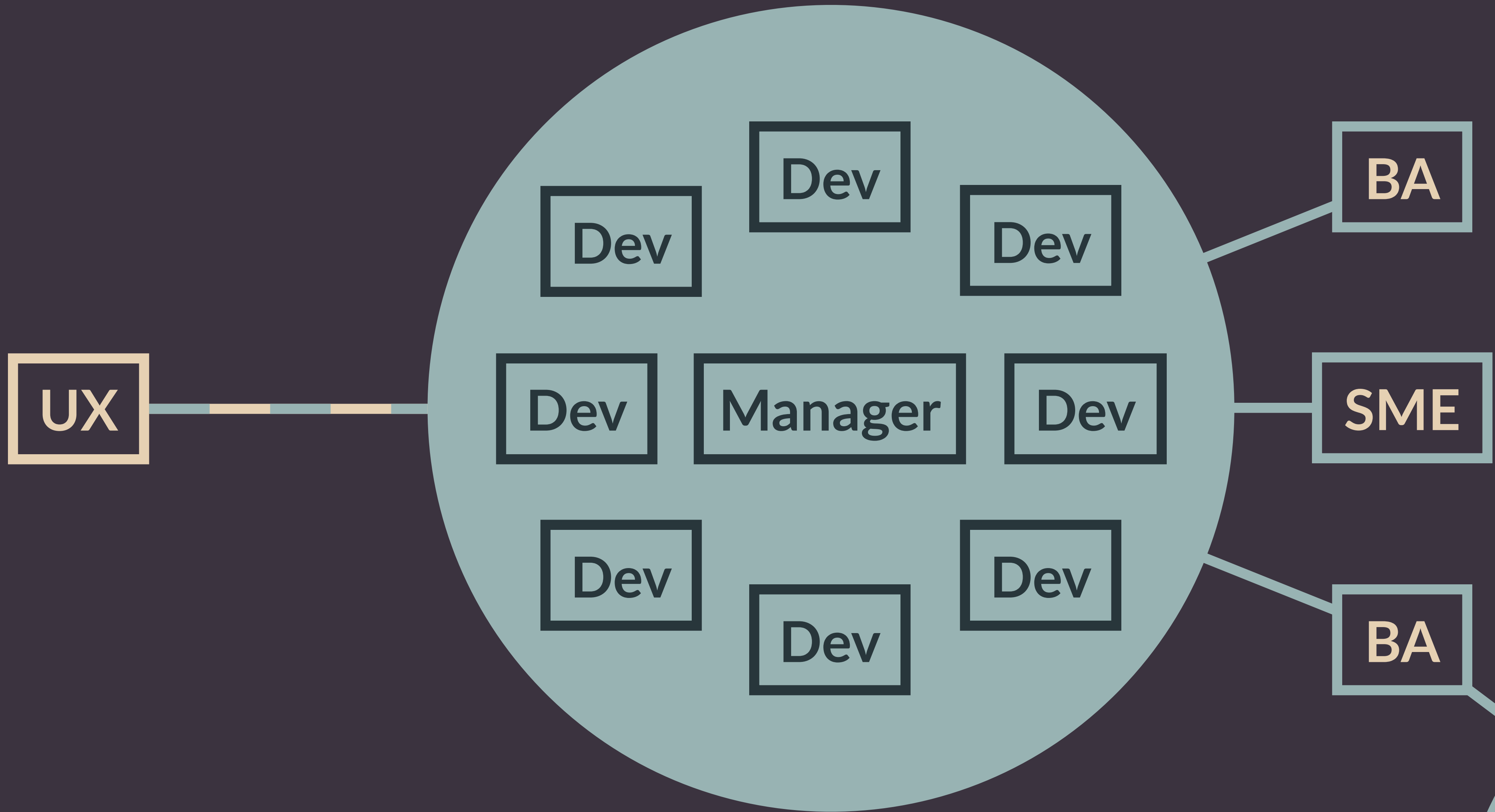
**Web apps have unknown  
device & software features.**



“The fact is that we can’t absolutely rely on the availability of any specific technology when it comes to delivering a Web experience.”

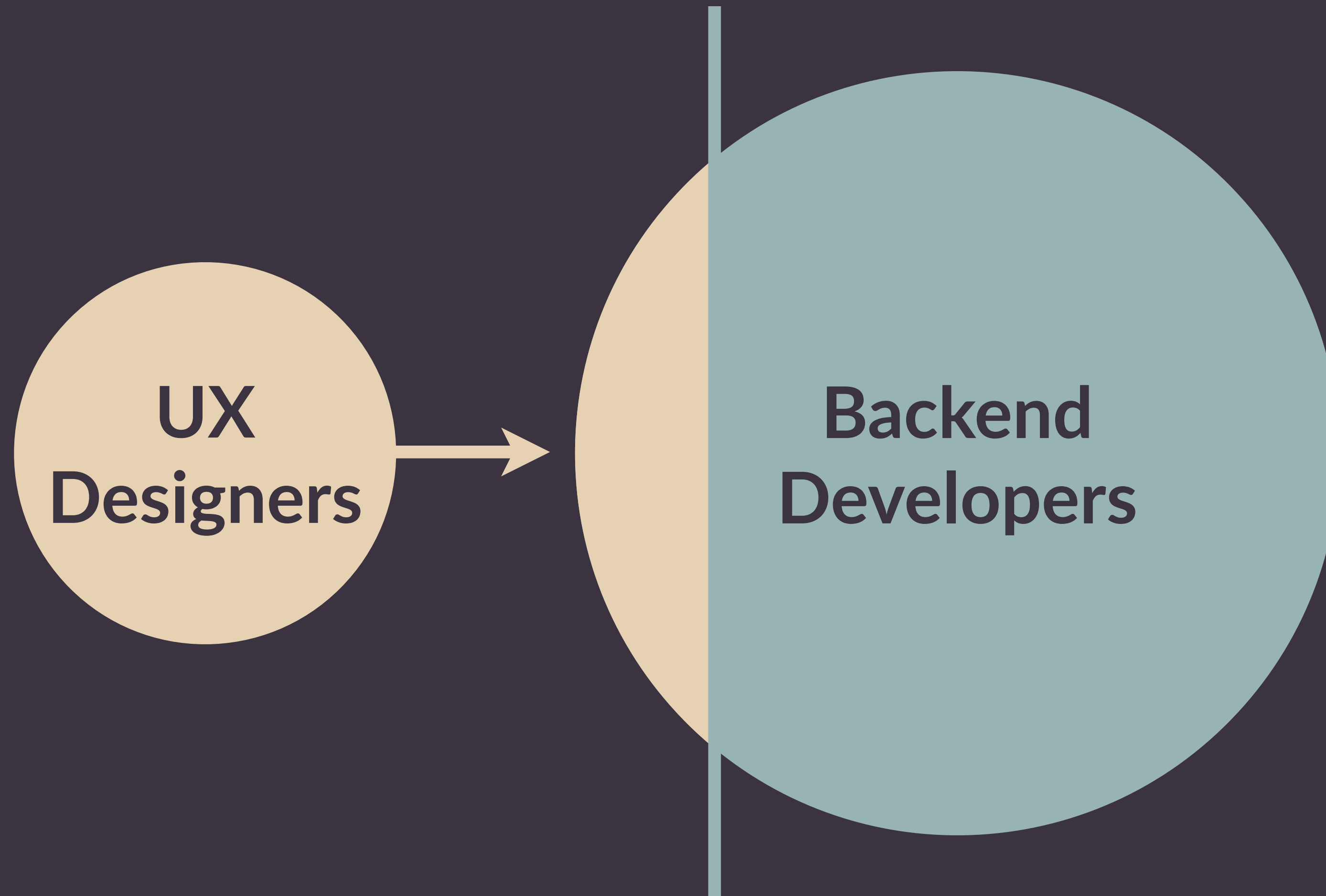
—Aaron Gustafson, *A Fundamental Disconnect*

# A TRADITIONAL TEAM STRUCTURE



# ARBITRARY WALLS OF RESPONSIBILITY

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# USER EXPERIENCE DESIGNERS

UX designers research the needs & expectations of users.

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Create interface designs.

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Create interface designs.

Evaluate & optimize task flow.



## KEY SKILLS

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Interface design

Interaction design

User research

“...empower your designer with the maximum amount of agency to do their job well. No one tells the accountant how to do their job, but I’ve been in a hundred workplaces where people told the designer how to do theirs.”

—Mike Monteiro, *Before You Hire Designers*

# USER INTERFACE DEVELOPERS

UI developers are responsible for everything that is sent to the browser.

**UI developers are responsible for everything that is sent to the browser.**

**Aligns with experiential vision as imagined by designers.**

## KEY SKILLS

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**HTML, CSS, JavaScript**

**Build systems**

**Pre- & Post-processors**

## KEY SKILLS

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Client-side frameworks

Performance

Integrating with back-end APIs

## KEY SKILLS

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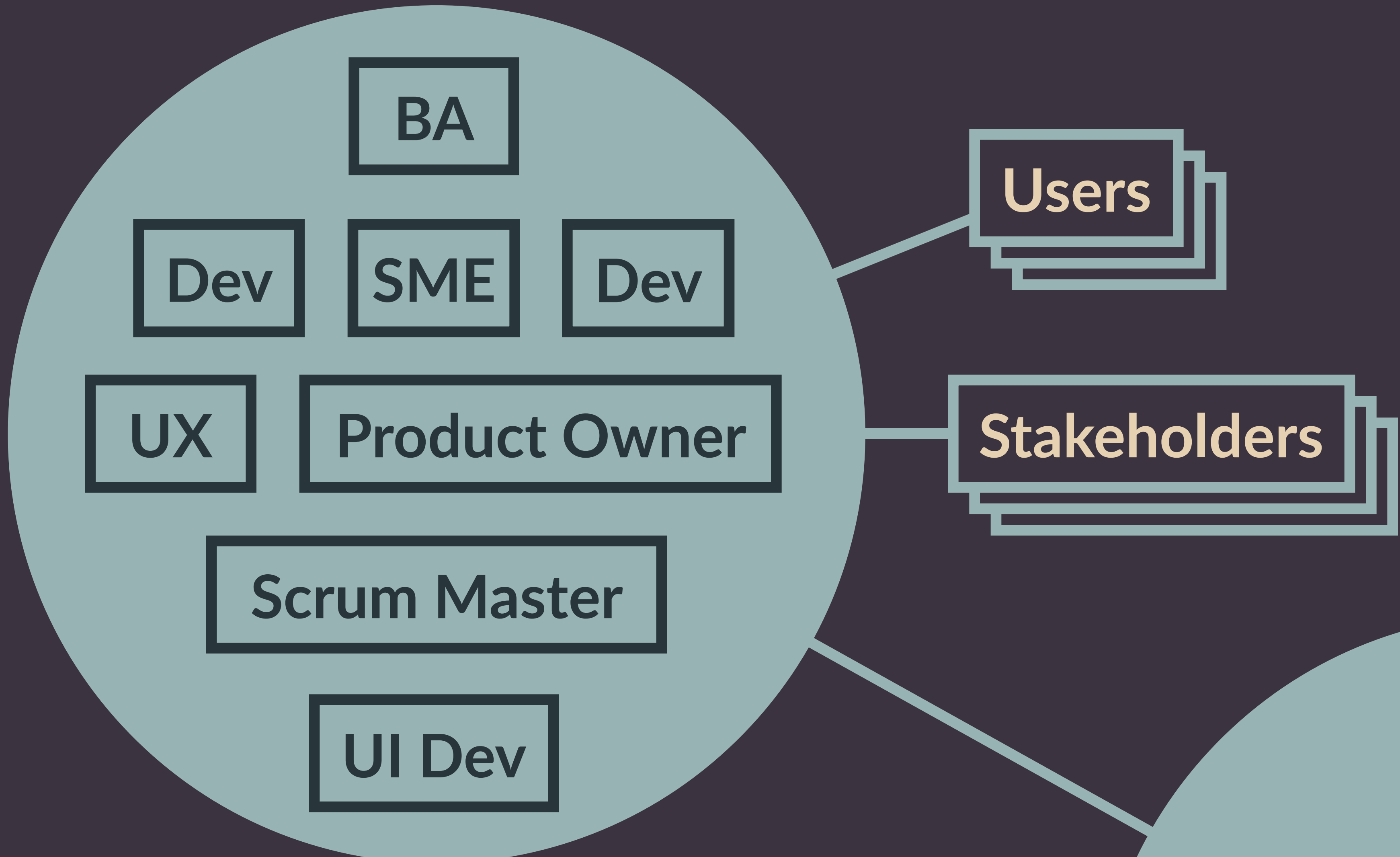
**Responsive design**

**Progressive enhancement**

**Accessibility**

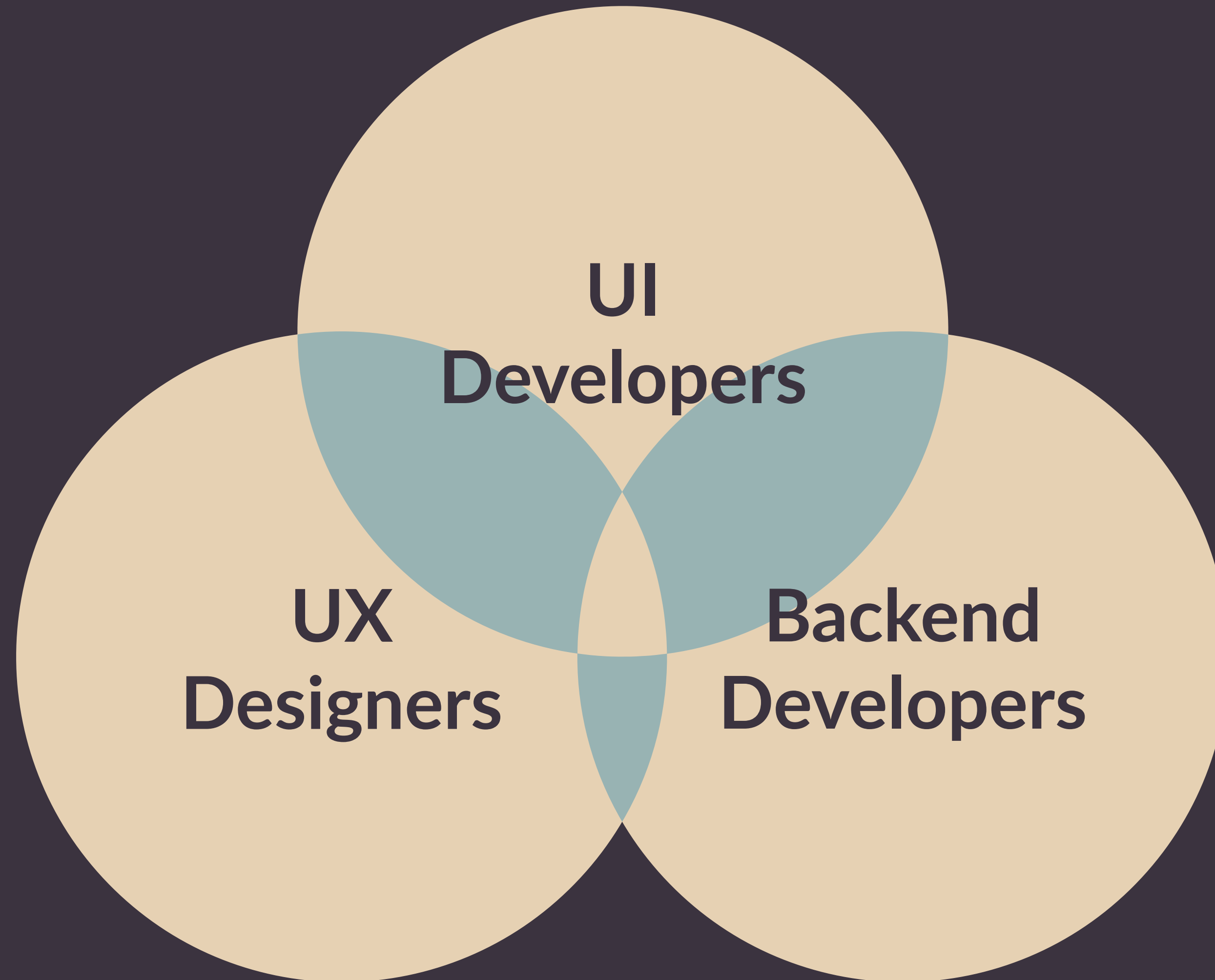


A BETTER  
TEAM STRUCTURE



# INTERACTION AMONG ROLES

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“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, *Development is Design*

# TECHNOLOGICAL LANDSCAPE

**Context aware.**

**Mitigate factors hindering  
user goals.**

**Device agnostic.**

**Use won't always occur on the primary or preferred device.**

**“It is your mission to get your content out, on whichever platform, in whichever format your audience wants to consume it. Your users get to decide how, when, and where they want to read your content. It is your challenge and your responsibility to deliver a good experience to them.”**

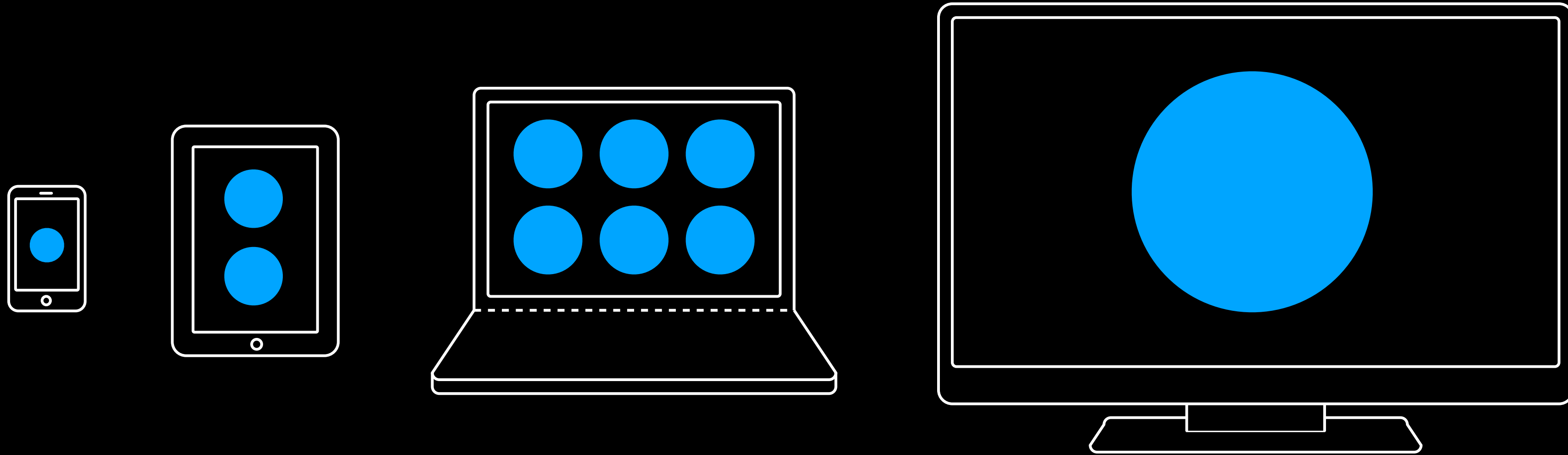
**—Karen McGrane, *Your Content, Now Mobile***



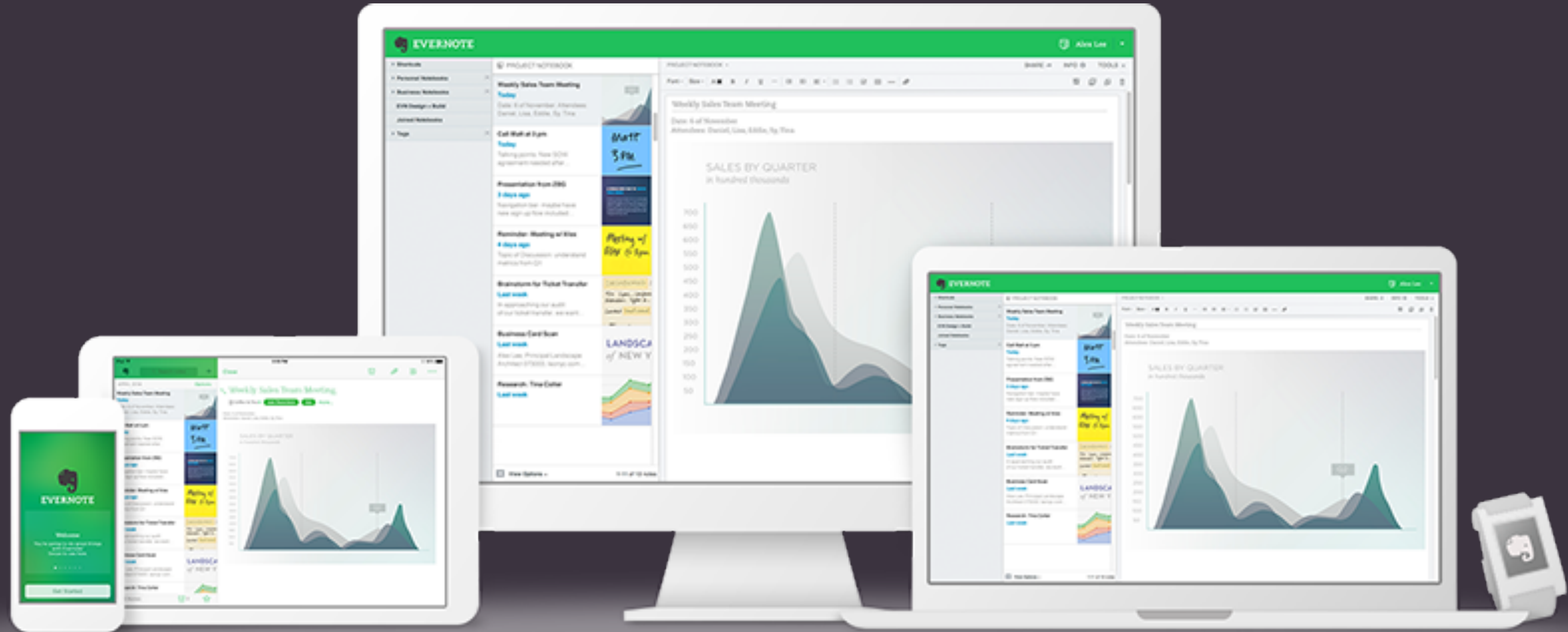
**Multiscreen patterns.**

# COHERENCE PATTERN

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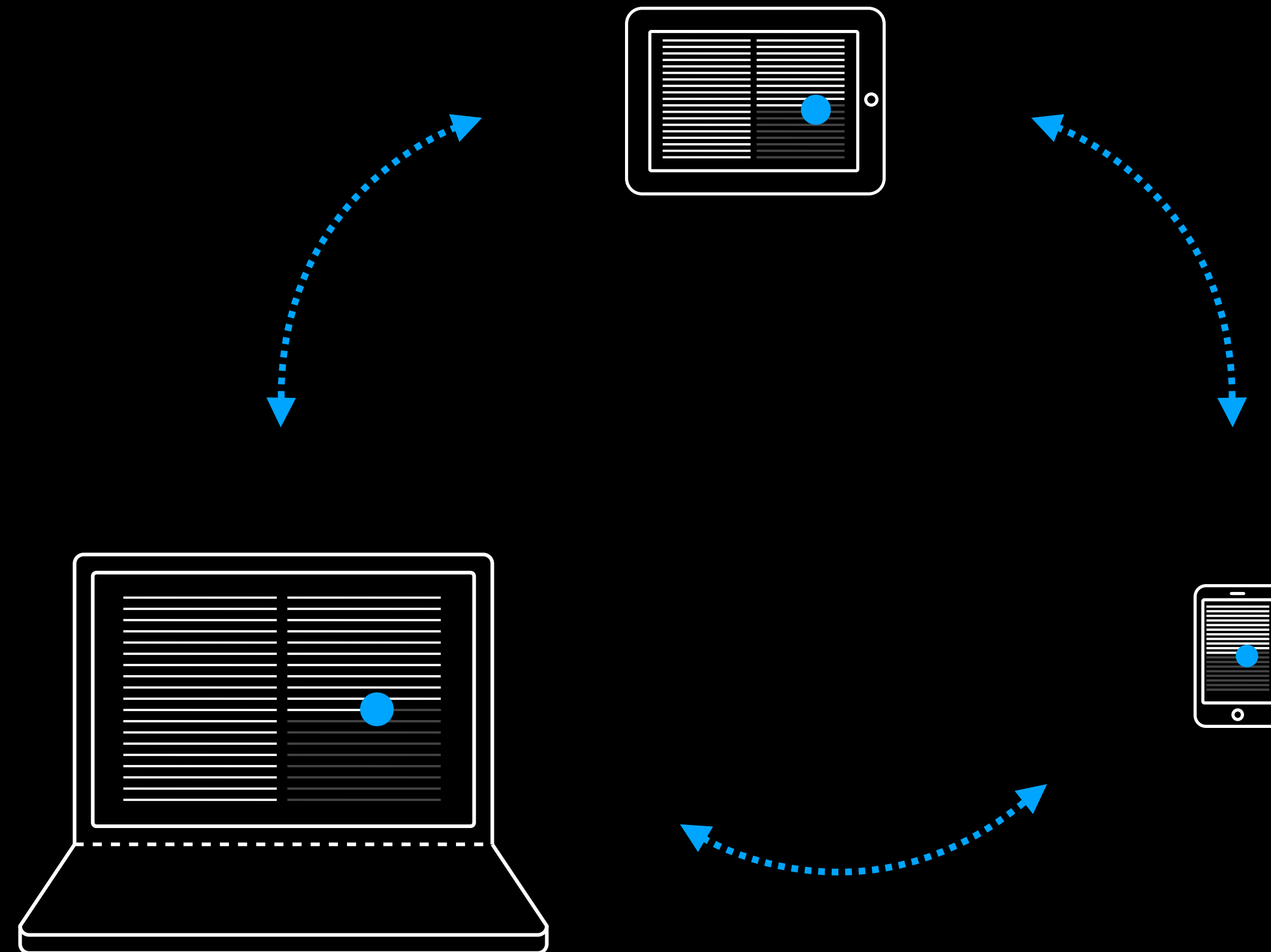


# COHERENCE PATTERN



# SYNC PATTERN

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# SYNC PATTERN

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Audible Whispersync for Voice

# COMPLEMENTARY PATTERN

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# COMPLEMENTARY PATTERN



Scrabble for iPad

OUTCOMES



## OUTCOMES

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**Focused roles**

## OUTCOMES

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**Focused roles**  
**Collaboration**

## OUTCOMES

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**Focused roles**

**Collaboration**

**UI equally prioritized**

## OUTCOMES

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**Focused roles**

**Collaboration**

**UI equally prioritized**

**Better user experience**

## OUTCOMES

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**Focused roles**

**Collaboration**

**UI equally prioritized**

**Better user experience**

**Positioned for future changes**

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KUALI DAYS

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