



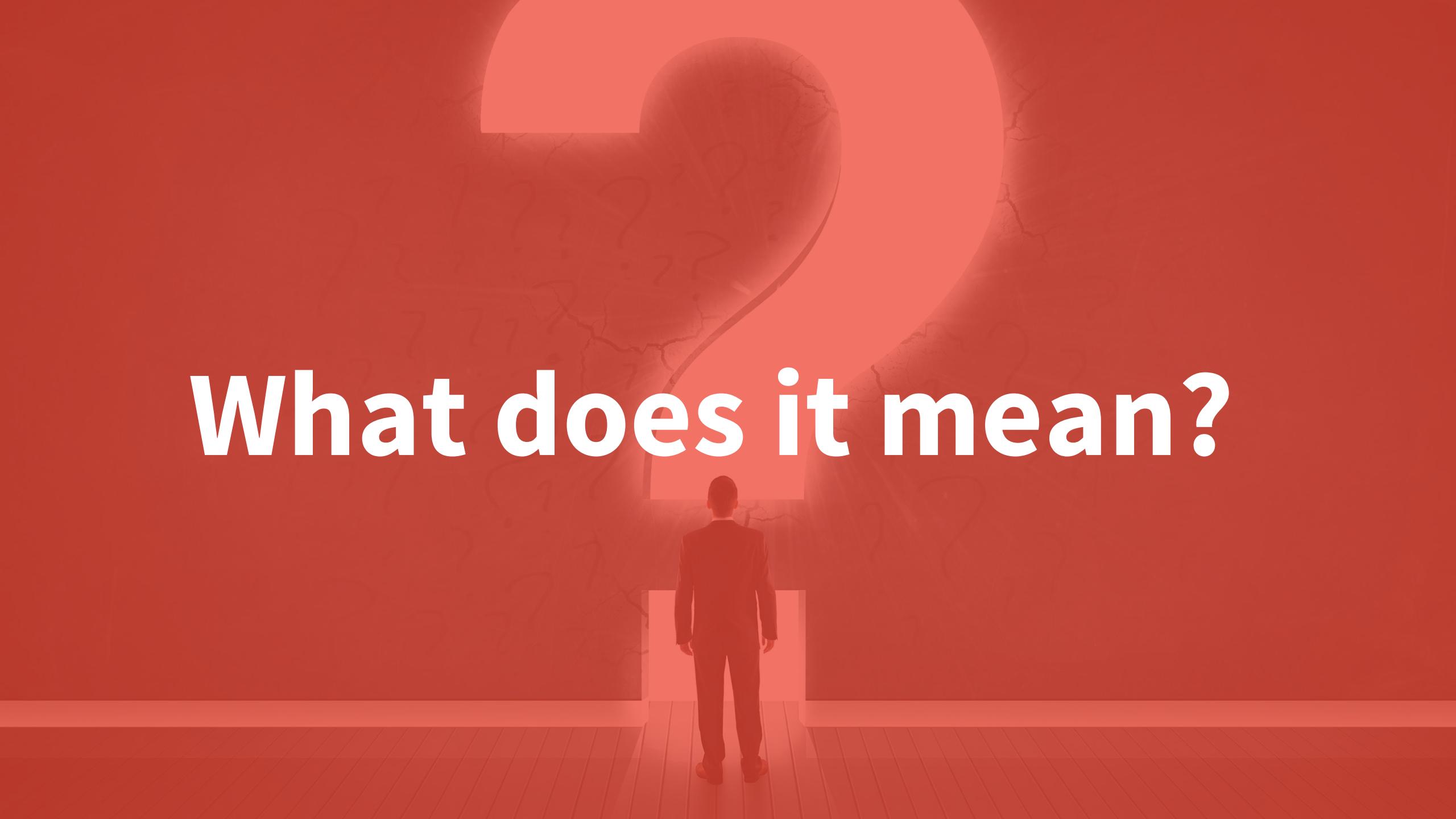
Developers with Super Powers

Cross-functional Developers

FORUM ONE



Stephen Lucero
Technical Architect, Forum One



What does it mean?

A large, two-story brick house with a prominent front porch and a horse-shaped weathervane on the roof. The house features multiple gables and arched windows. It is surrounded by a well-maintained lawn and shrubs.

Let's build a house

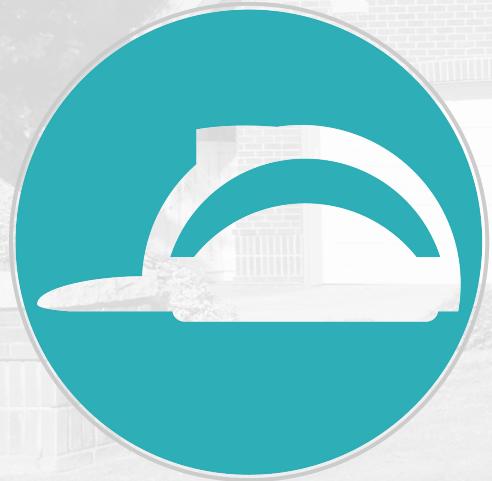


Let's build a house

Disclaimer: I don't build houses

I am not and have never been in the business of professional home building. Accuracy of this content is not guaranteed and should not be cited as such. This information is for the sole purpose of the example I am setting and you do not want me building your home.

Who do we need?



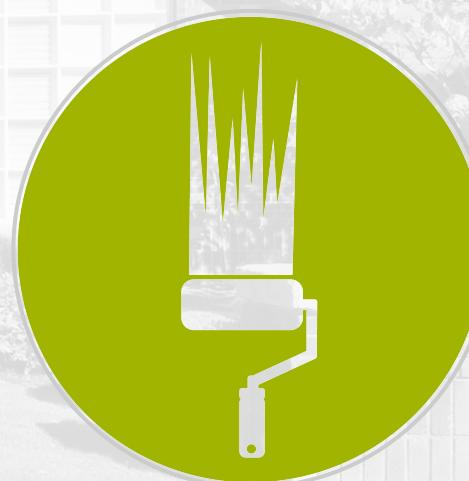
Architect



Carpenter



Electrician



Painter



How do they work?

And why is it a problem?

How they work

- Everybody focuses on their specialty
- Linear completion of tasks
- People are blocked (time is wasted)
- Inter-role communication is minimized

A large, multi-story brick house with a prominent chimney and a horse statue on the roof, set in a well-maintained lawn with stone pillars.

If they just had super
powers...

Some key concepts

Some key concepts

- Flexibility is key
 - Titles are too constraining

Some key concepts

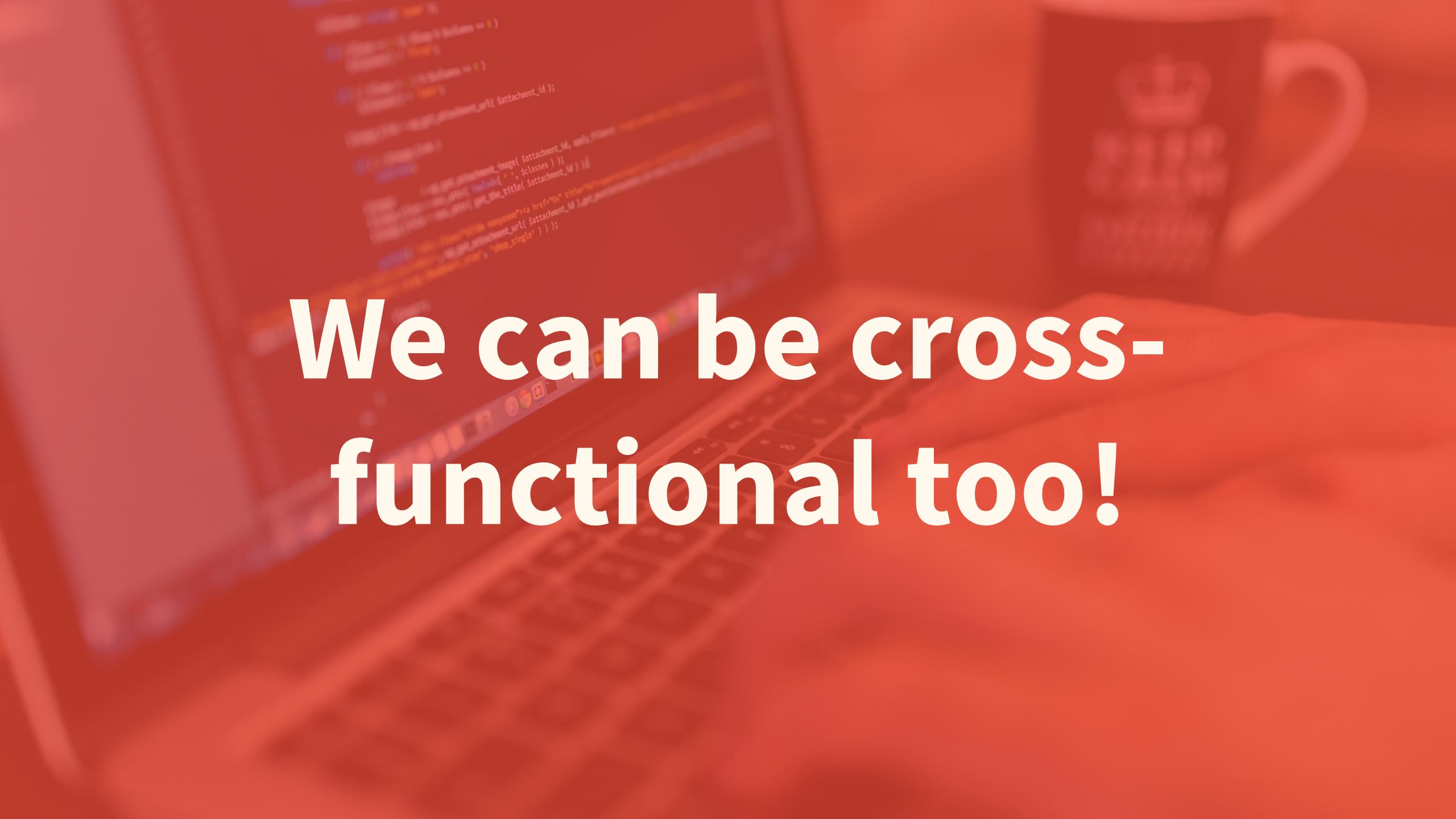
- Flexibility is key
- Overlapping skills
 - All workers have multiple skills
 - Specializations vs familiarity

Some key concepts

- Flexibility is key
- Overlapping skills
- Everyone helps where needed
 - Project vs task efficiency

If they were cross-functional

- Architects with hammers!
- Electricians with pencils!
- Plumbers with paint brushes!
- Everybody with champagne glasses



We can be cross-functional too!

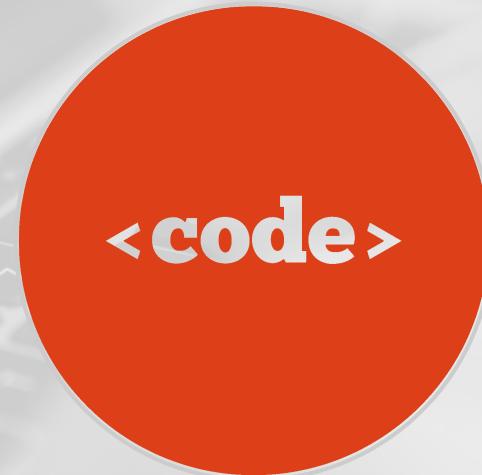
What skills do we need?



**Project
Manager**



Designer



Site-builder



Themer

How do we do it?

- Help where you're needed
 - Fill in while others are busy

How do we do it?

- Help where you're needed
- Extend outside your box
 - Learn new skills
 - Be proactive

How do we do it?

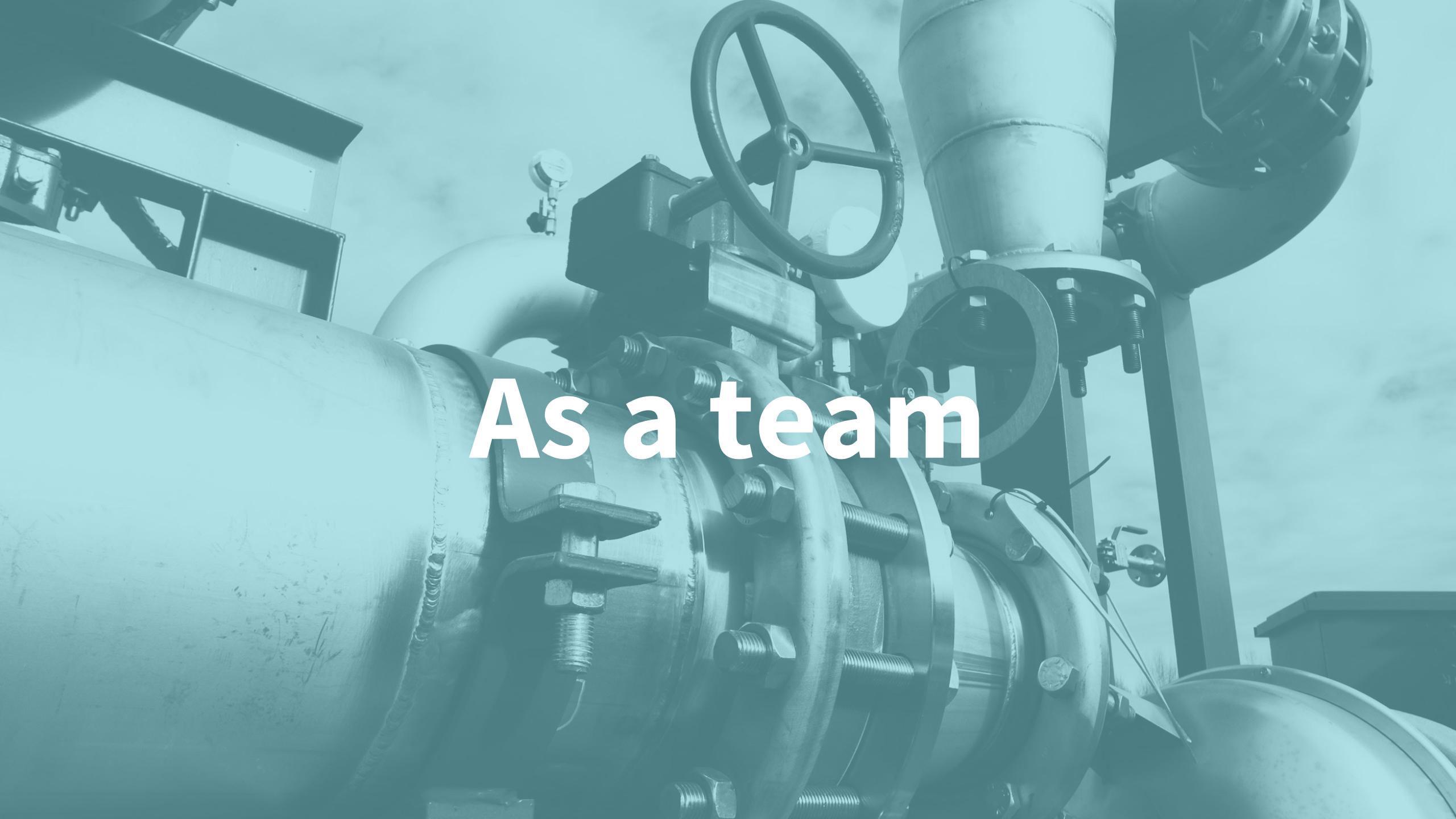
- Help where you're needed
- Extend outside your box
- Strengthen your team
 - Share role-specific knowledge
 - Improve processes

Reap the benefits

- More shared knowledge
- Improved team collaboration
- More personal investment
- Potential team consolidation
- Ongoing team relationships

A photograph of three large, weathered orange barrels standing side-by-side against a light-colored wall. Each barrel has a metal band around its middle and a yellow strap with a metal buckle across the front. The barrels appear to be made of metal and have a slightly textured surface.

Becoming more cross-
functional

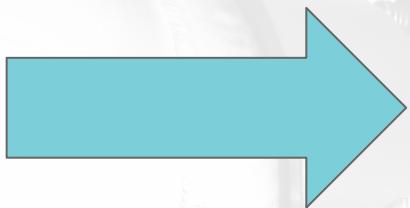


As a team

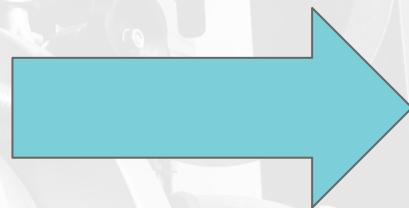
As a team

One-way pipelines are bad

Design



Build



Theming

As a team

Talk to each other

Design

Build

Theming

Feedback

Feedback

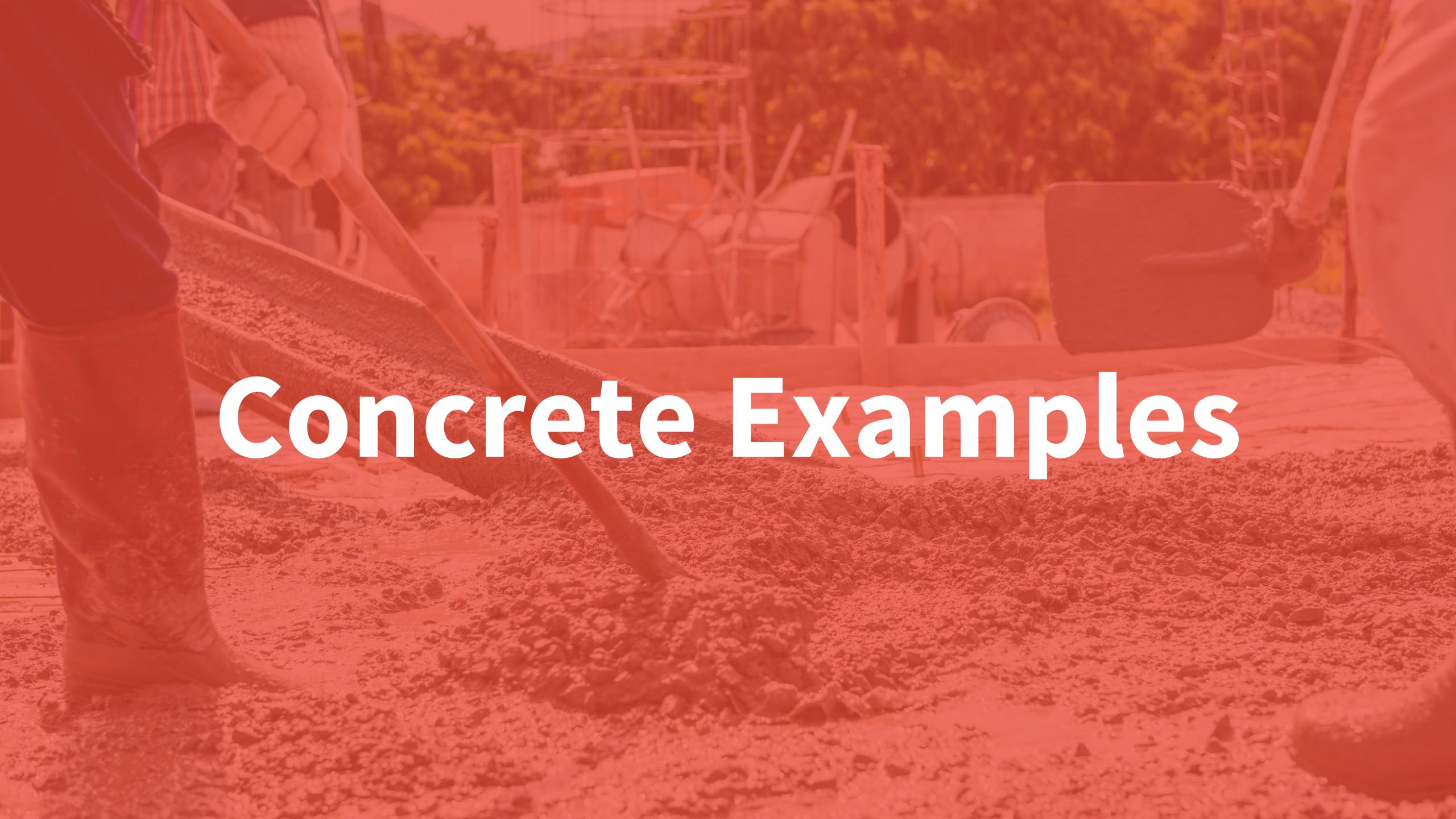


A close-up, slightly blurred photograph of a person's hands playing a keyboard. The hands are positioned over the keys, with fingers pressing them. A bright blue light is cast over the scene, creating a soft glow and casting shadows. The background is dark and out of focus.

Individually

Individually

- Leave your comfort zone
- Tackle problems
- Collaborate with others
- Review revered work
- Find popular resources

A large, dark brown pile of gravel or aggregate sits on a wooden boardwalk. In the background, a concrete mixer truck is parked next to a metal frame structure, likely a form for pouring concrete. The scene is set outdoors with trees visible in the distance.

Concrete Examples

Theming

Learn the Theming API

- Pre/Post-process functions
- Template overrides
- Template suggestions
- Render arrays

Learn the Theming API

Benefits

- Reuse existing work
- More themable and reusable elements
- More tools for your toolbox

Explore Contrib Markup Modules

- Display Suite ([ds](#))
- Field Groups ([field_group](#))
- Clean Markup ([clean_markup](#))
- Fences ([fences](#))

Explore Contrib Markup Modules

Benefits

- Cleaner markup with less effort
- Consistent markup for theming

Learn the Tools of the Trade

- CSS

Learn the Tools of the Trade

- CSS
- CSS Preprocessors
 - SASS: Syntactically Awesome Stylesheets
 - Less

Learn the Tools of the Trade

- CSS
- CSS Preprocessors
- JavaScript
 - Behaviors

Learn the Tools of the Trade

- CSS
- CSS Preprocessors
- JavaScript
- Theme Developer module ([devel_themer](#))

Learn the Tools of the Trade

- CSS
- CSS Preprocessors
- JavaScript
- Theme Developer module ([devel_themer](#))
- Responsive strategies

Learn the Tools of the Trade

Benefits

- Make adjustments directly
- Create more complete modules
- More tools for debugging
- Diagnose display issues

Explore Theming Frameworks

- **SMACSS**: Scalable and Modular Architecture for CSS
 - Reusable classes
 - Component-driven

Explore Theming Frameworks

- **SMACSS**: Scalable and Modular Architecture for CSS
- **BEM**: Block, Element, Modifier
 - General to specific classes
 - Consistent naming patterns

Explore Theming Frameworks

- **SMACSS**: Scalable and Modular Architecture for CSS
- **BEM**: Block, Element, Modifier
- Go find some more!

The background of the slide features a subtle, abstract pattern of light blue and white cubes arranged in a grid. The cubes are slightly offset from each other, creating a three-dimensional, wavy effect that spans across the entire frame.

User Experience

Where To Start

- What's done for us?
 - CMF vs CMS
- Who is it for?
 - Target audiences
 - Don't forget authors and admins!
- What are they trying to do?

Helpful Questions

- How often will users do this?
- If you haven't seen this before...
 - How easy is it to find?
 - How easy is it to understand?
- Could it be easier?
- Can it be done in fewer steps?
- Is there a common way to achieve this?

Know Your Resources

- Drupal UI Standards
 - <http://drupal.org/ui-standards>
- Personal experience
 - Every site you use
- Recurring support tickets
- Online community

Some Guidelines

- Get out of the way
- Be helpful
- Be direct

Get Out of the Way

- Don't overwhelm the user with options
 - Convenience vs complexity
- What is the user trying to do?

Be Helpful

- Never assume familiarity
- Provide guidance
- Speak their language

Be Direct

- Fewer steps are better
- Provide shortcuts
- Keep the user on track

Quick Enhancements

- Add descriptions and help text
 - Field labels
 - Field help text
 - Content type descriptions
 - Rich text is supported

Quick Enhancements

- Add descriptions and help text
- Sort and group related fields
 - Field groups ([field_group](#))
 - Field collections ([field_collection](#))

Quick Enhancements

- Add descriptions and help text
- Sort and group related fields
- Hide unnecessary configuration
 - Simplify ([simplify](#))

Quick Enhancements

- Add descriptions and help text
- Sort and group related fields
- Hide unnecessary configuration
- Add shortcuts
 - Shortcut (shortcut - core module)
 - Help text
 - Custom contextual links ([ccl](#))

Automation

- Manual editing takes work
- Hide unless confirmation is needed
- Consistency is better

Automation Tools

- Computed Field ([computed_field](#))
- Automatic Entity label ([auto_entitylabel](#))
- Pathauto ([pathauto](#))
- Redirect ([redirect](#))
- Menu Position ([menu_position](#))
- Rules ([rules](#))

Validation

- Instills confidence
 - Protects the author
 - Maintains structure and design
- Doesn't have to be painful
 - Helpful reminders
 - Active guidance

Validation Tools

- Field validation ([field validation](#))
- Clientside validation ([clientside validation](#))
- Maxlength ([maxlength](#))
- Conditional fields ([conditional fields](#))

A person wearing a dark suit and tie is holding a small, rectangular gift box with a red ribbon bow. The background is a solid orange color.

Wrapping Up

A photograph of three men in dark business suits standing on a bridge. The man in the center wears a black mask over his eyes. They are positioned in front of a city skyline with numerous skyscrapers under a cloudy sky.

Q&A

All super powers referenced in this presentation are metaphorical. Please use this knowledge responsibly and do not attempt unassisted flight.

A group of five men in business suits and superhero costumes stand in front of a city skyline at night. They are wearing various superhero masks and capes. The man on the far left holds a small star-shaped badge. The man second from the left wears yellow goggles. The man third from the left has a blue mask and a blue cape with white stars. The man fourth from the left wears a purple mask and a purple cape with white stars. The man on the far right wears a red mask and a red cape. All five men have their right fists raised in a superhero pose.

THANK YOU!

Stephen Lucero
slucero@forumone.com

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