# Building Blocks of Agile

Make your deadlines, finish in your budget, and build a team that works together



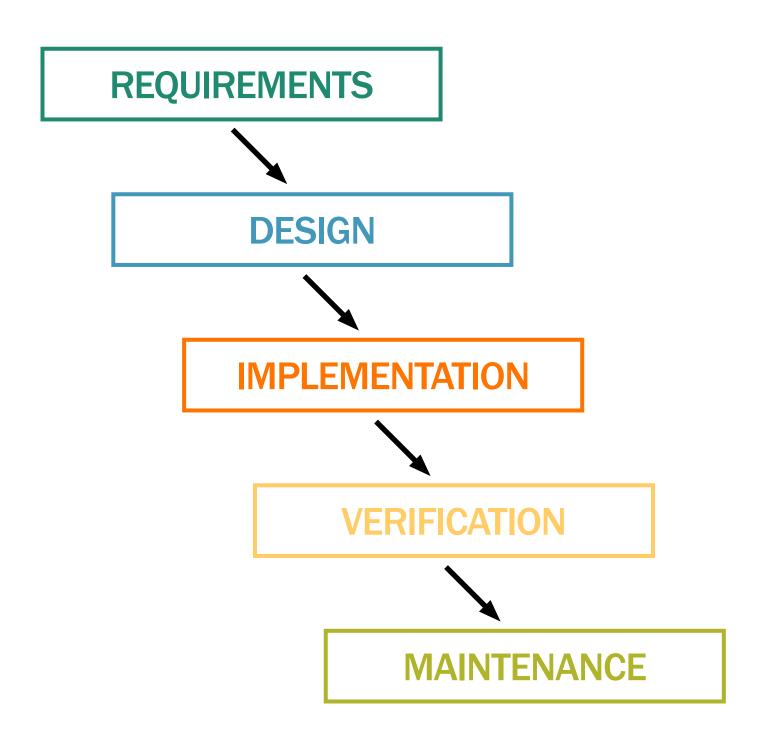
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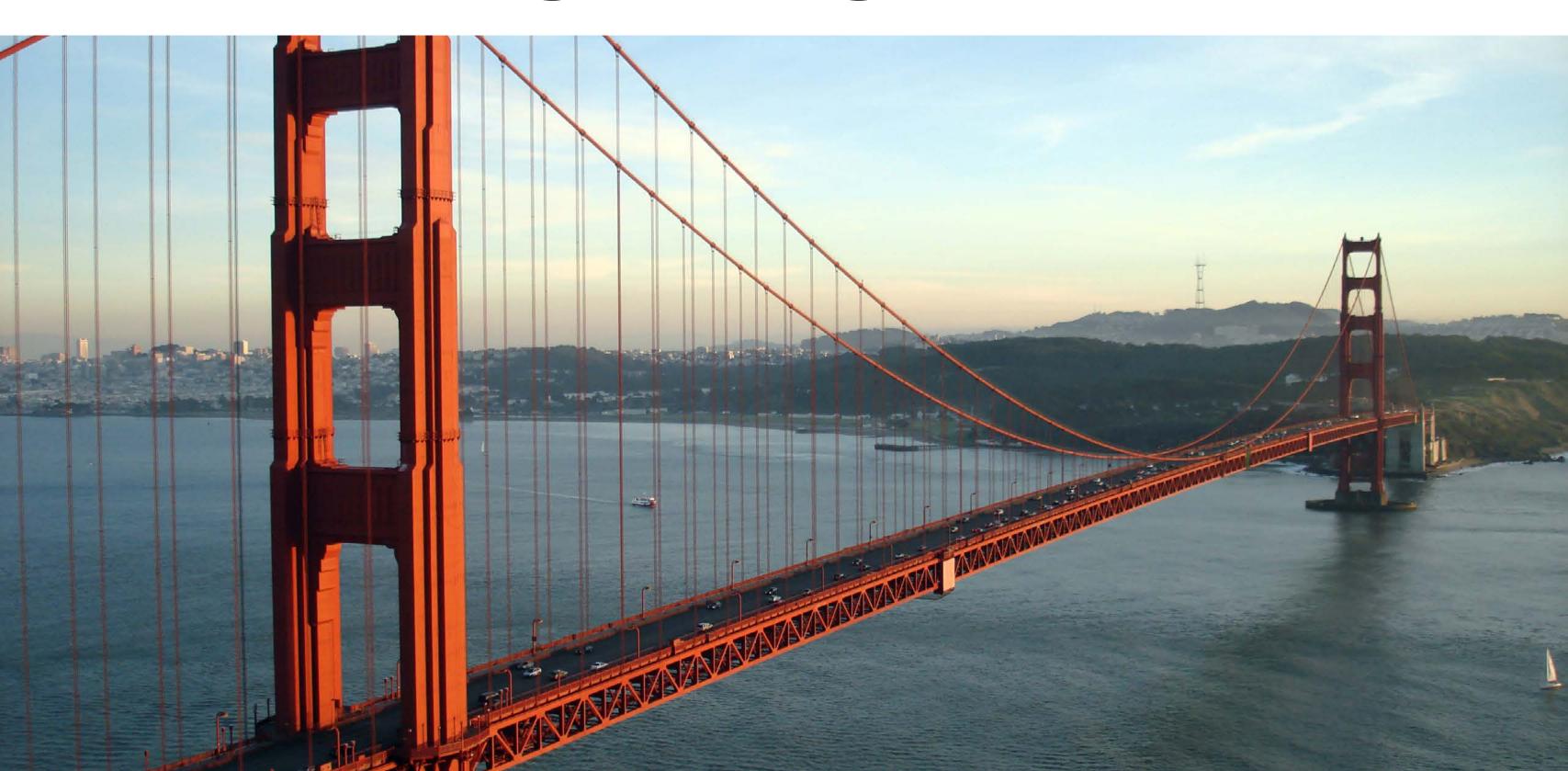
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#### Waterfall Model

- Sequential design process
- Progress flows downward
- \_ Used in software development
- \_ Maps to making other things

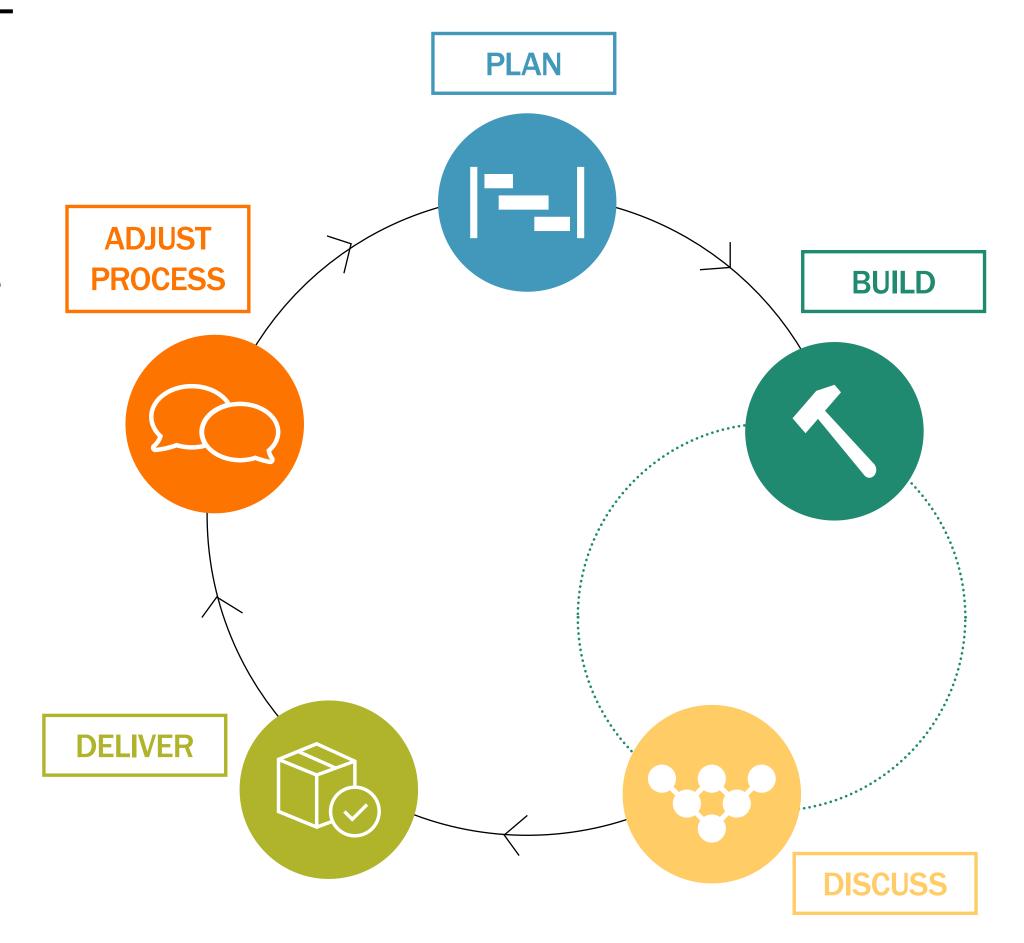


## Like building a bridge...



## Agile Model

- \_ Flexible cycle of steps
- \_ Embrace and respond to change
- \_ Mix and match for best results, pick what fits your needs



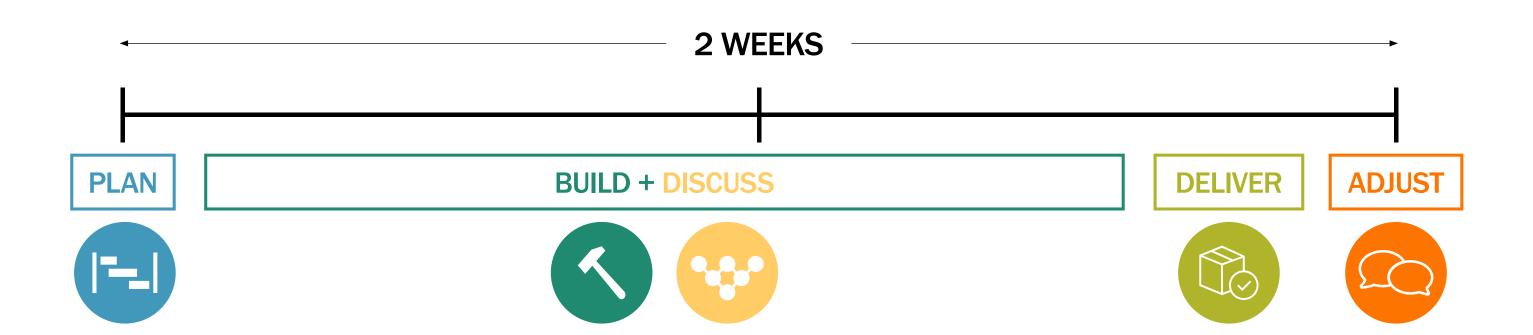
### Waterfall

# Agile

SCOPE	_ Full scopes are known at the beginning of a project	_Scope is flexible, focus instead on goal you want to accomplish
CUSTOMER	_ Customer is involved only in requirements and delivery phases	_ Customer is constantly involved and collaborated with
SCHEDULE	_ Tasks and deliverables are rigidly scheduled for project up front	_ Delivery date known up front, work is scoped in small chunks
CHANGES	_ Scope changes are slow and difficult to respond to	_ Scope can be adjusted based on needs from the customer

## Using Agile

- \_ Divide work into time chunks, deliver working product at the end
- Over communicate
- \_ Know your customer
- \_ Engage your team
- \_ Focus on output, not process



- \_ User stories
- \_ Backlog
- \_Sprint
- \_ Roles

#### **User stories**

- Like requirements, but from the perspective of the user
- \_ Describes what the user needs to accomplish
- \_ Format: "As a [user type] I need to [do this task] so I can [attain this goal]."
- Ex: As a homeowner, I want to apply for a permit so I can get permission to add a new room on my home

- \_ User stories
- Backlog
- \_Sprint
- \_ Roles

#### Backlog

- \_ A list of user stories
- \_ All together, this list describes the features in your end product
- Prioritize and choose user stories to "solve" in each sprint

- \_ User stories
- \_ Backlog
- \_Sprint
- \_ Roles

#### **Sprint**

- \_ A defined chunk of time where you work on user stories in your backlog
- Ex: In a 2-week sprint, a team might finish10 user stories
- \_ At the end of each sprint, you should have a real thing that helps users

- \_ User stories
- \_ Backlog
- \_Sprint
- \_ Roles

#### Roles

stories

- <u>Customer:</u> Internal client or resident who needs something
- Product owner: Liason between thecustomers and team building something^ Translate customer needs into user
- \_ <u>Agile team:</u> The team that builds something to solve user needs

## You're the Agile Team

\_ Your task:

Build a laptop stand with legos.

\_ Customer:

User who needs more room on their desk to work

Product owner:

David and Amy, who talk to the customer

- \_ User stories:
- ^ As an office worker, I want a laptop stand so I can have more desk space
- ^ As a mobile office worker, I want my stand to be sturdy and not fragile so it doesn't fall apart when I move it

#### How It Will Work

PLAN: 5m

BUILD + DISCUSS: 10m

**DELIVER: 2m each** 

ADJUST: 3m











# Thanks for coming

Slides and notes http://c4a.me/legos

And thanks to Zac Cohn and Dave Zvenyach from 18F for inspiring the legos exercise.



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