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Game Developers Conference®
March 23-27, 2009 | Moscone Center, San Francisco

Advanced Scrum and agile development

Clinton Keith

Clinton Keith

CERTIFIED Scrum Alliance™
Scrum Trainer

Agile coach and trainer

- 24 years of development experience
- 15 years of game development experience
- 5 years of agile development experience in the game industry
- Introduced agile to the industry in March 2005

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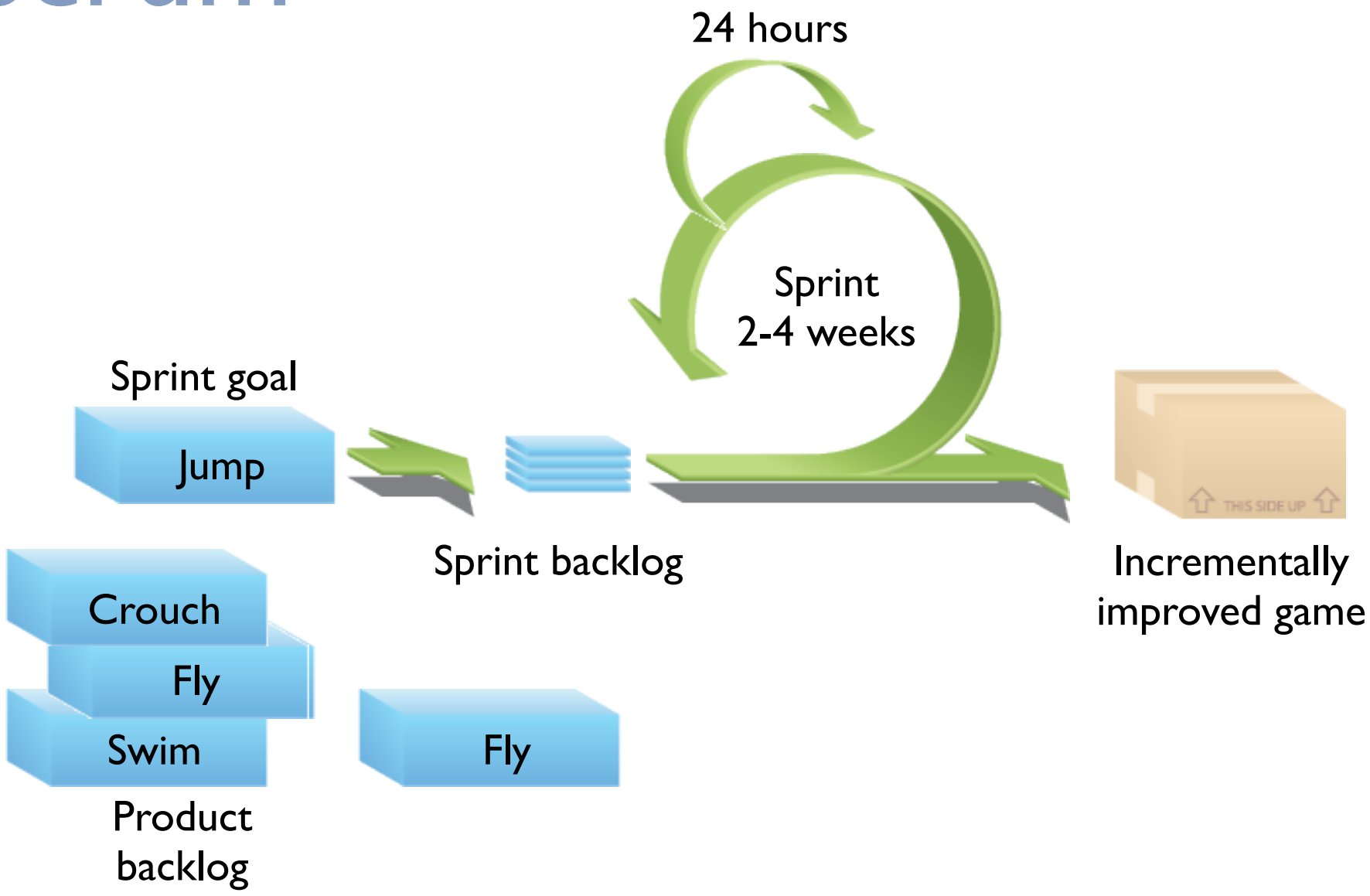
Agenda

- 3 minute tour
- Challenges & Solutions
- Summary
- Q&A

A 3 minute tour of Scrum

Scrum



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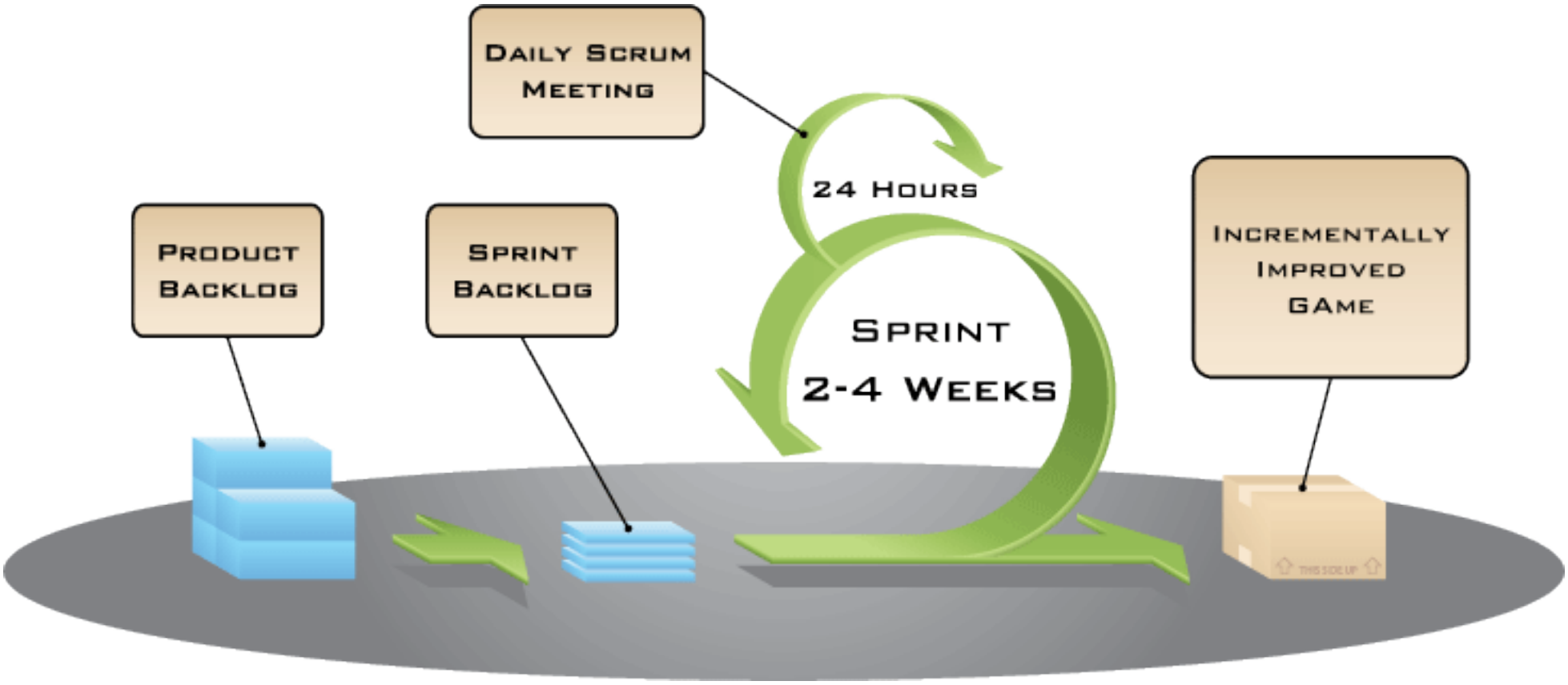
Putting it all together



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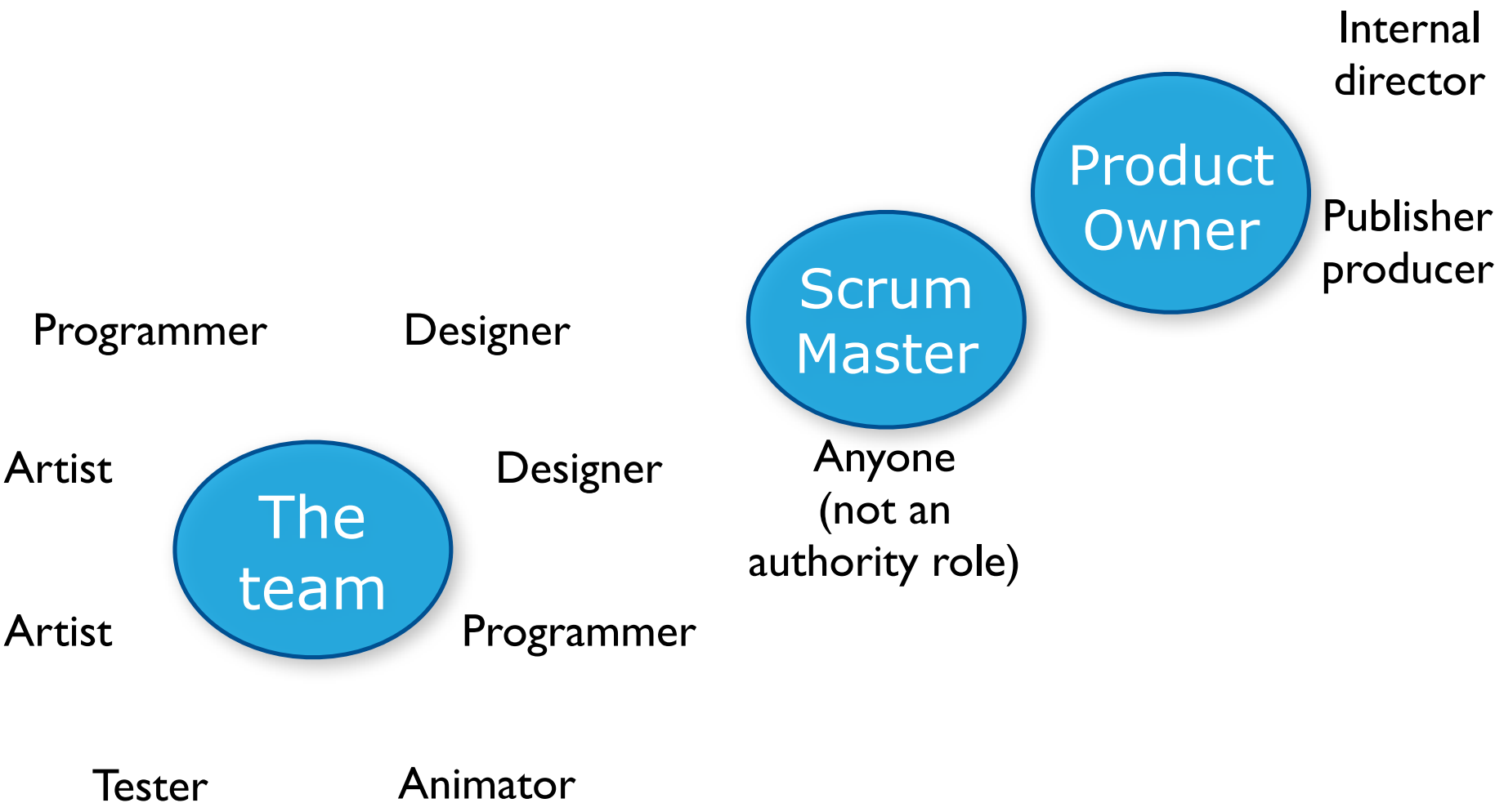
The Scrum project community



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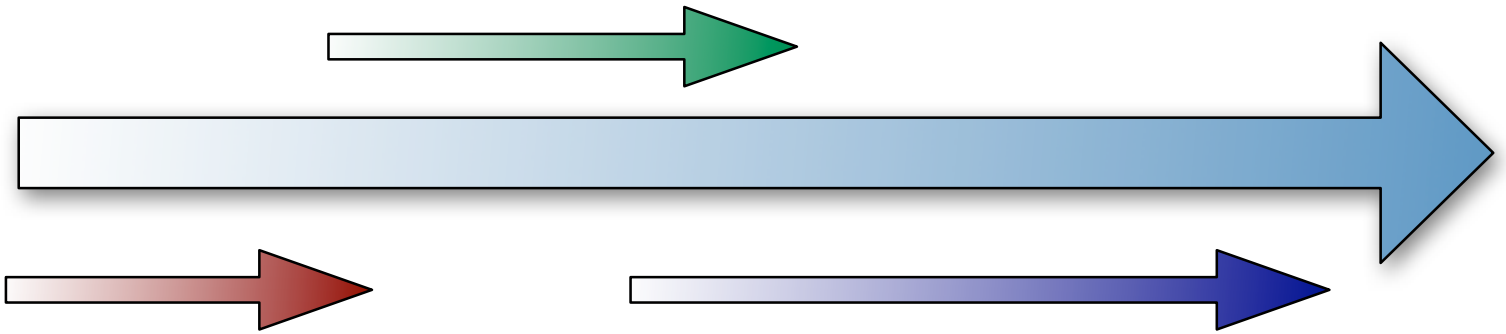
The Roadmap

Stage 2

- Journeyman
- 12-24 months
- Faster integrations
- Better testing
- Release planning



Stage 1

- Apprentice
- 3-12 months
- Daily Scrums
- Iterations
- "Done"

Stage 3

- Master
- Never ends
- Self organization
- Continuous improvement

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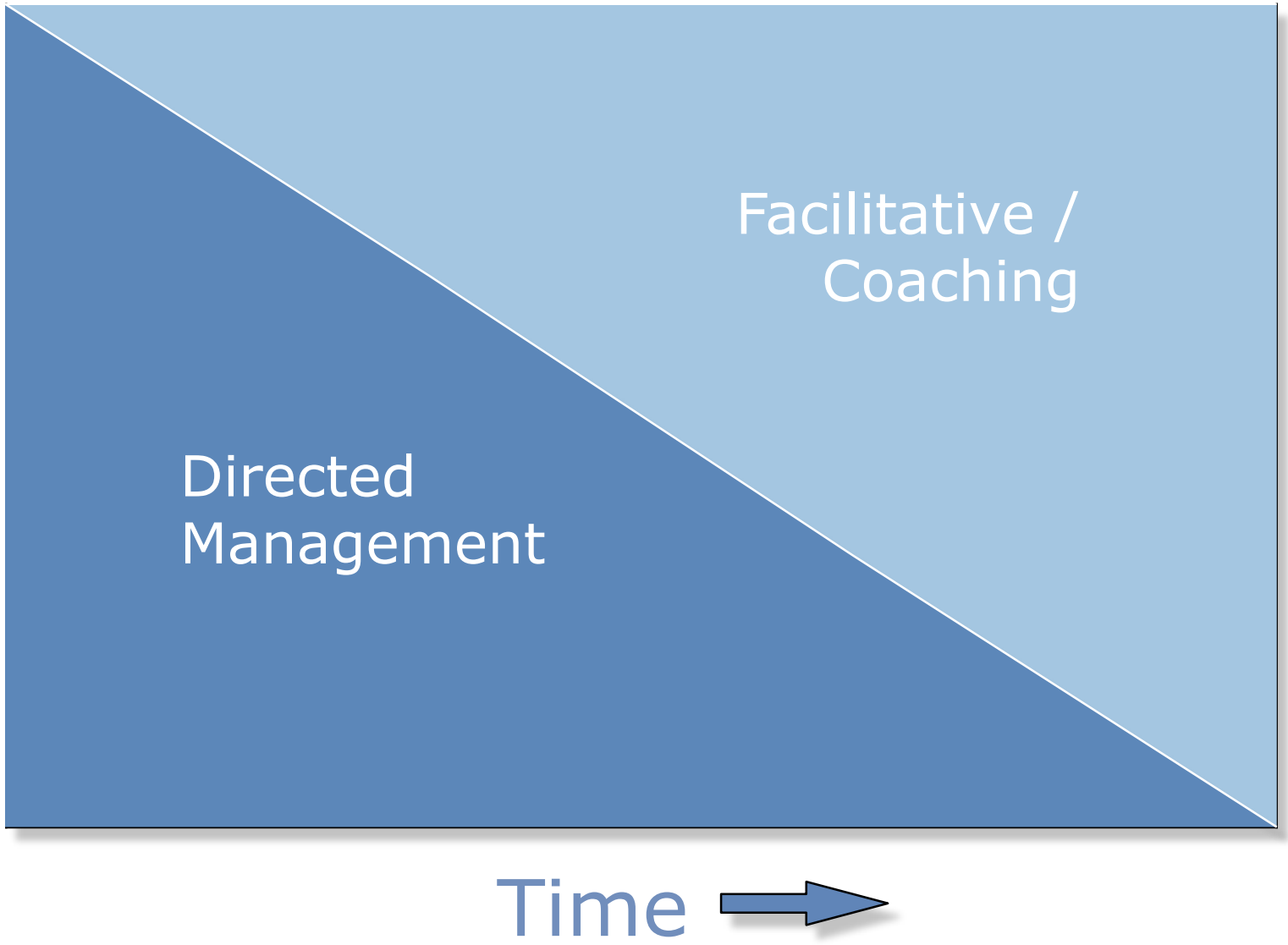
Project Leadership



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- 3 minute tour
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Switching from a push system to a pull system

- What is a “pull system”?
- “Pushing” tasks through Scrum
- The challenge of pull systems.
- Defining done

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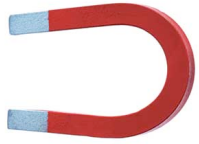
Scrum is a pull system

Sprint goal	Not started	In progress	Done
			

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Why a pull system?

- "Done" is the goal, not task completion
- Creates a "real" pace
  - Minimizes debt
- Allows true velocity to be measured
  - Velocity is a better measure than progress against a schedule
  - Focuses on what is "on the screen", not progress against a schedule
  - Reality vs "the plan"

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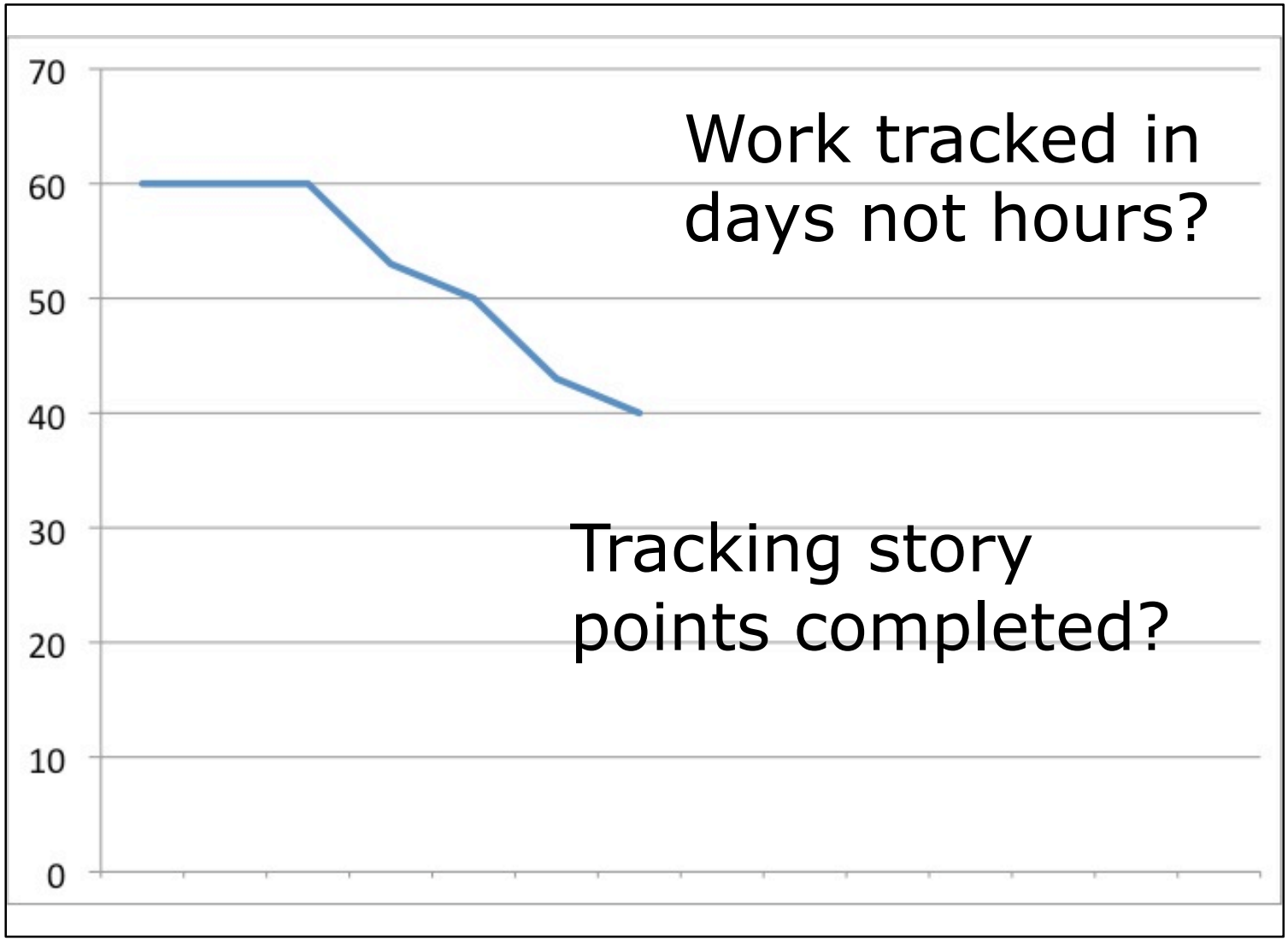
Burning down hours?



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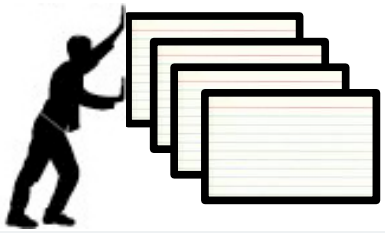
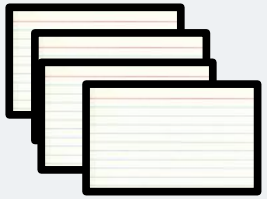
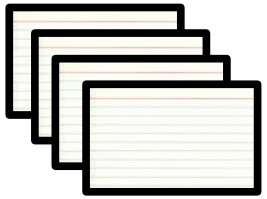
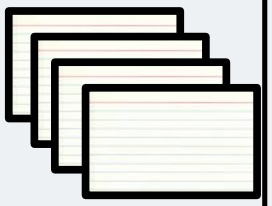
"Pushing" tasks through Scrum

Sprint goal	Not started	In progress	Done
			
			
			
			

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Pushing tasks in Scrum

- Task completion is the goal
- Goals often left incomplete
  - Bugs
  - Missing, yet unstated, requirements
- Velocity is slower
  - Collisions at the end of the sprint
  - More multi-tasking
- Symptoms
  - Mini-crunch every sprint
  - Very few iterations on the sprint goal
  - Not much polish

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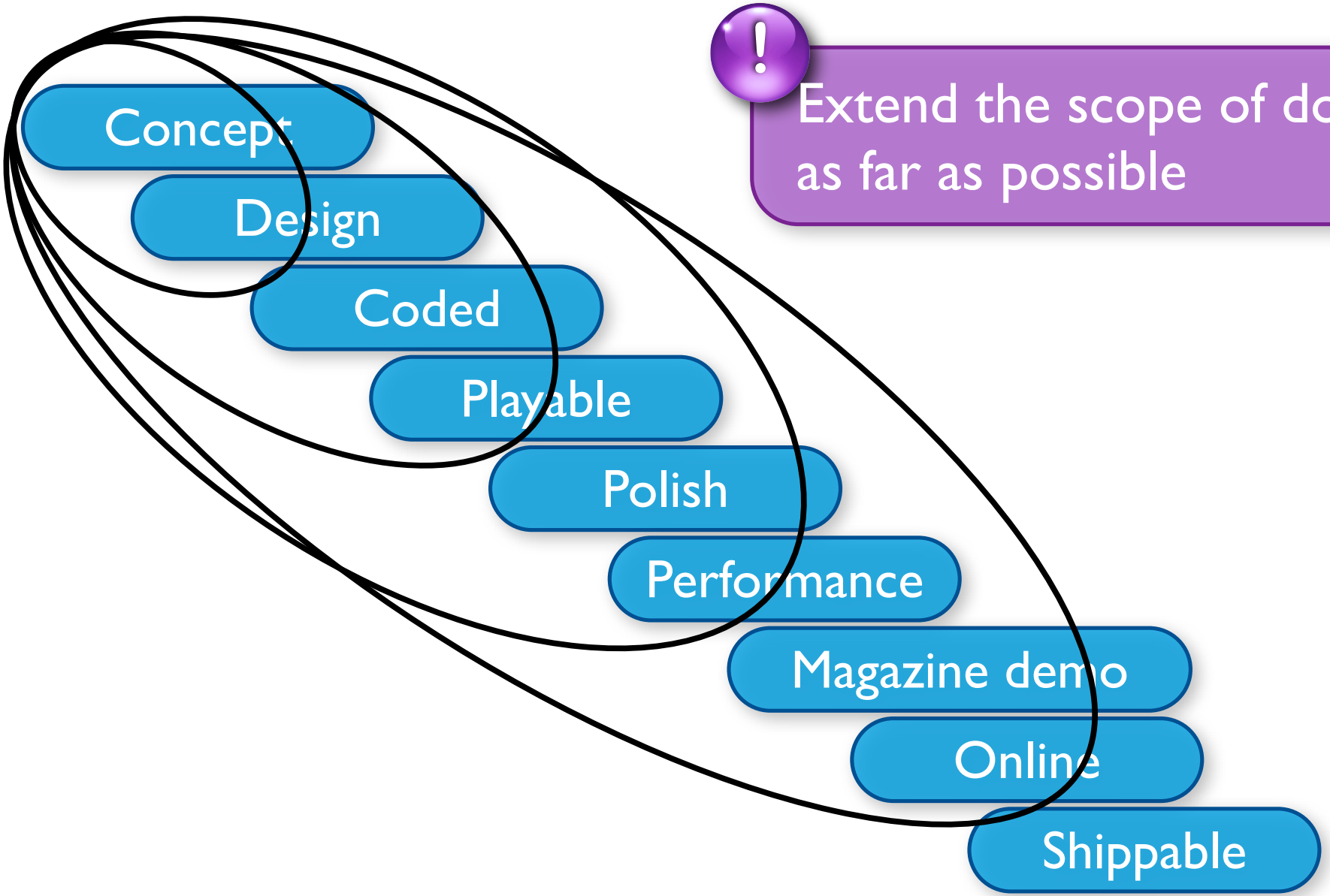
The challenge with pull systems

- Over reliance on tools
  - Daily scrums are not status reporting meetings
- "Over managing" the team
  - Let the team manage the tasks (i.e. the path to achieving the goal).
  - Help them make the right decisions
- Teams not taking ownership or making commitments
  - Common for teams new to Scrum
- Defining "done"

Defining Done



Extend the scope of done as far as possible

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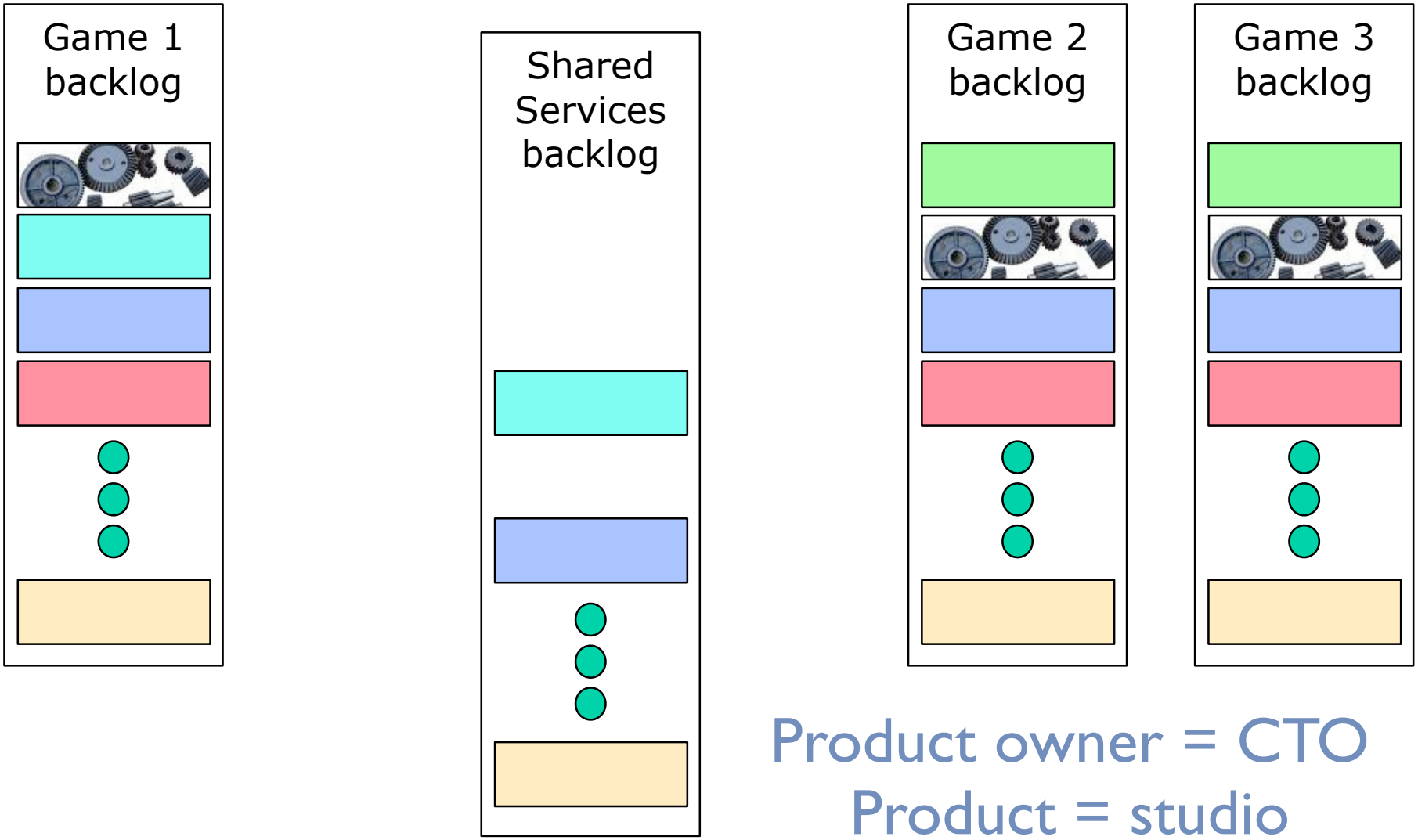
Shared service teams

Shared service teams



Product owner = CTO
Product = studio

= external shared services work

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The product owner

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The product owner

- Represents the customers
- One voice, even if not one person
- Usually an
  - Internal Director
  - Publisher Producer
    - Supplement with someone onsite
- Main responsibility is knowing what to build and in what sequence

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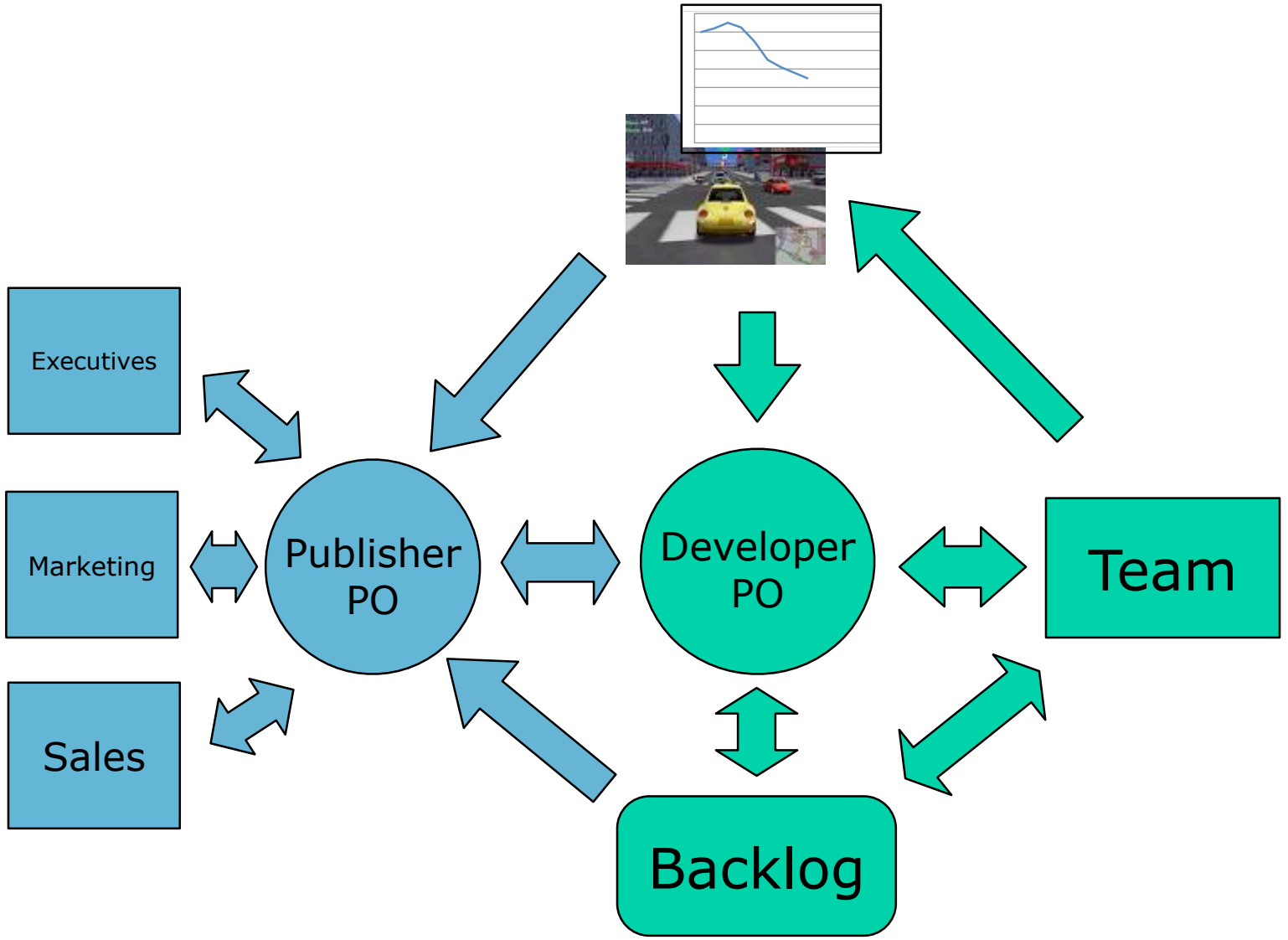
Communicating vision



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Parts on the garage floor

Leads to iterative and incremental death marches

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Documentation has its place

Agile phases for game development

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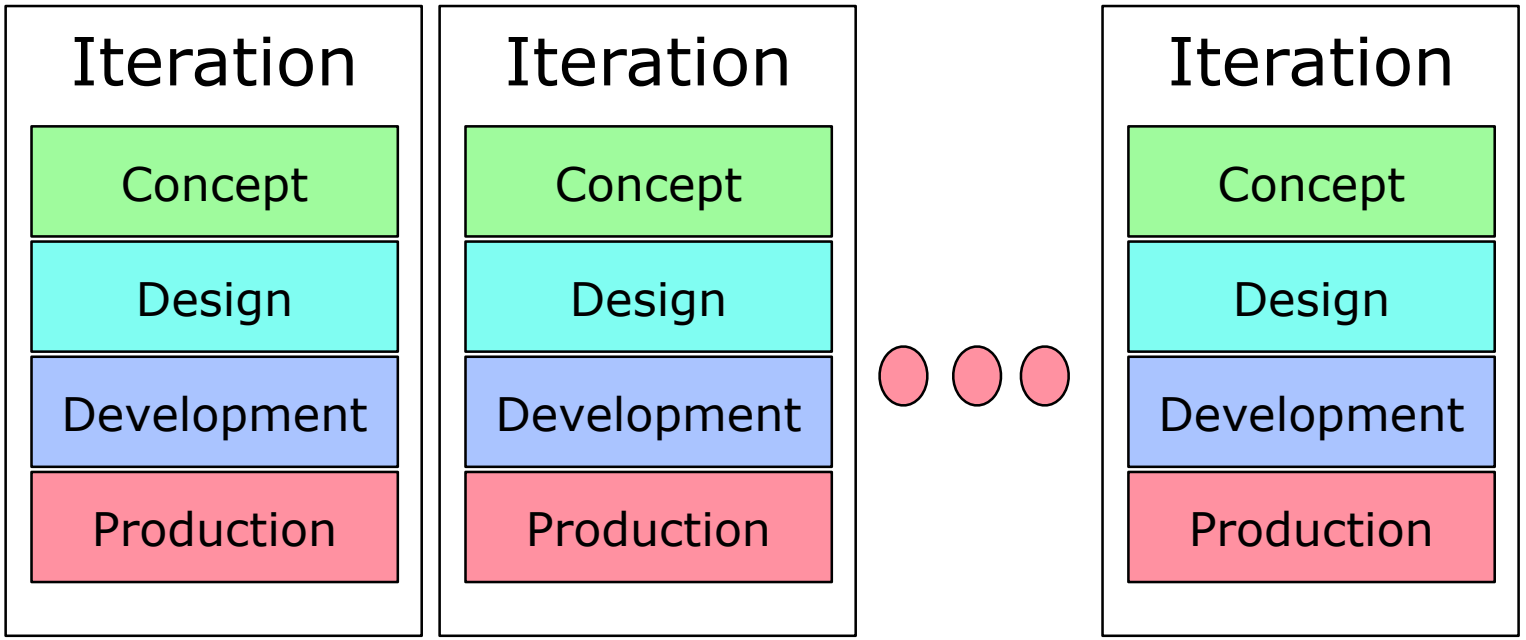
Agile is phase-less



...is game development?

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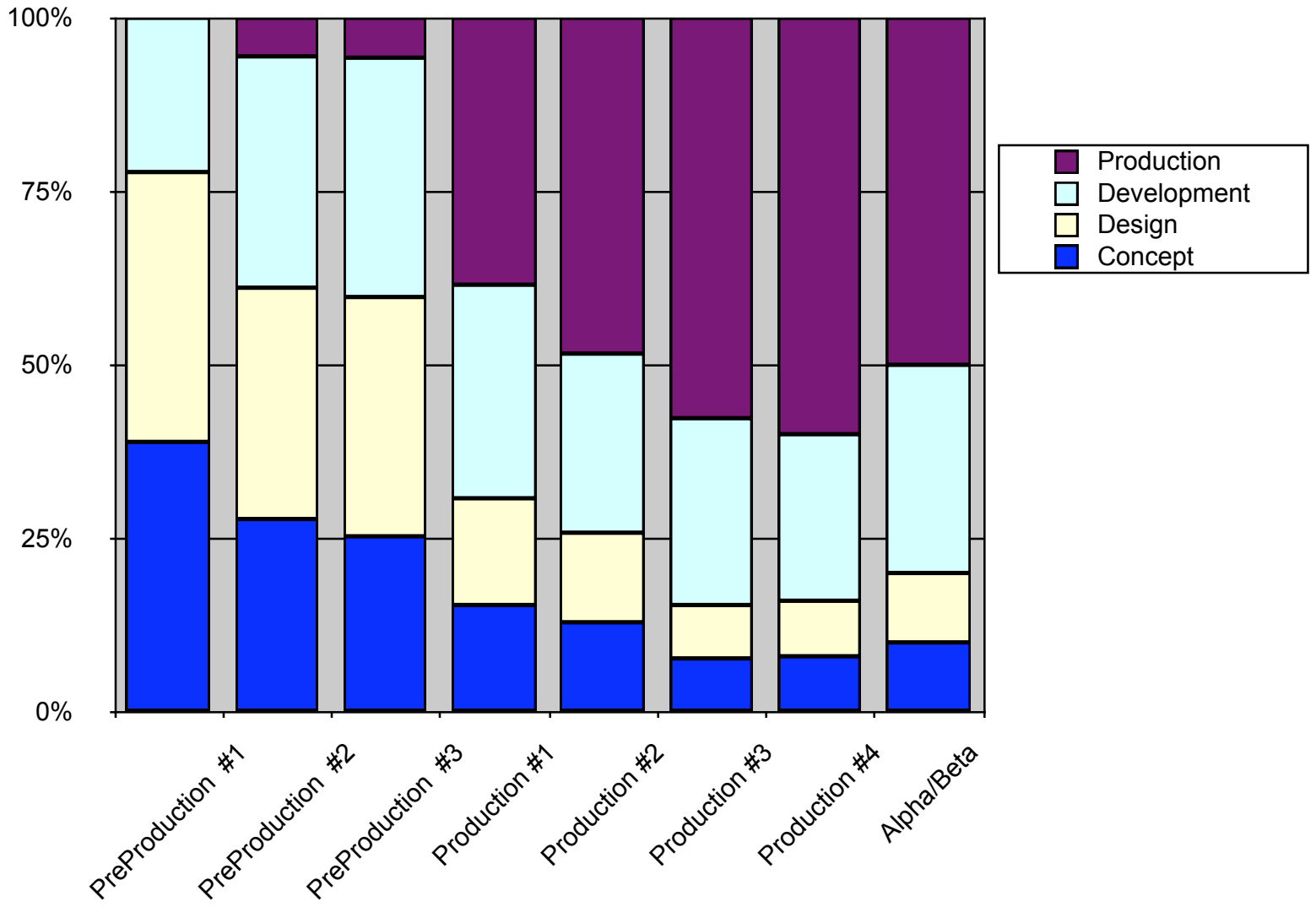
Not Quite



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Preproduction vs Production

	Preproduction	**Production**
Questions or Statements	What and how?	Build it!
State of mind	Collaboration	Flow
Goals	Correctness	Efficiency

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Which process?

Scrum	Lean
What and how?	Build it!
Collaboration	Flow
Correctness	Efficiency

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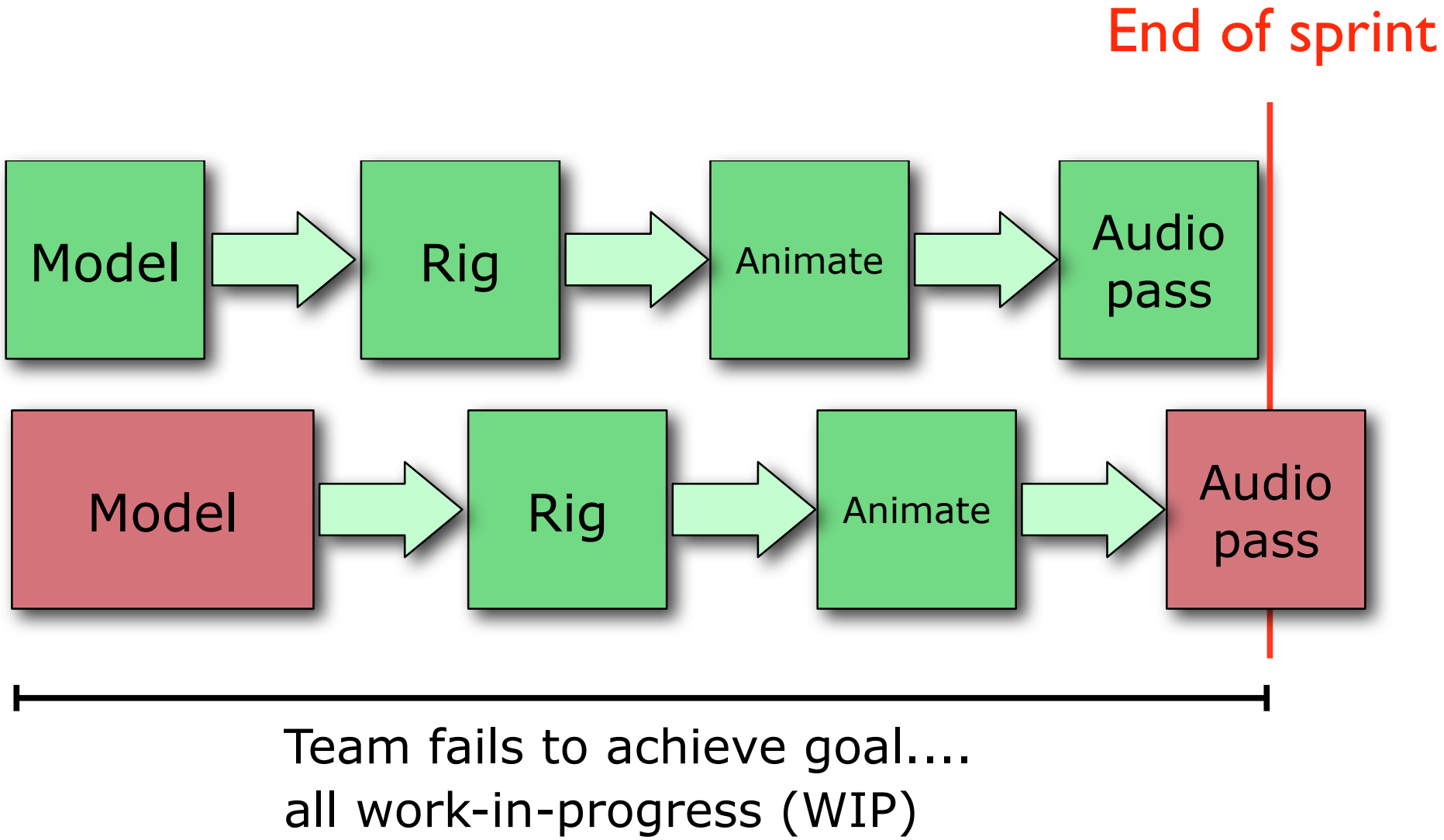
What is Lean?

- Agile development methodology that is not as well known as Scrum.
- Focused on complex flow of work and pull systems to represent that flow.
- Are better suited to more predictable work-flow.

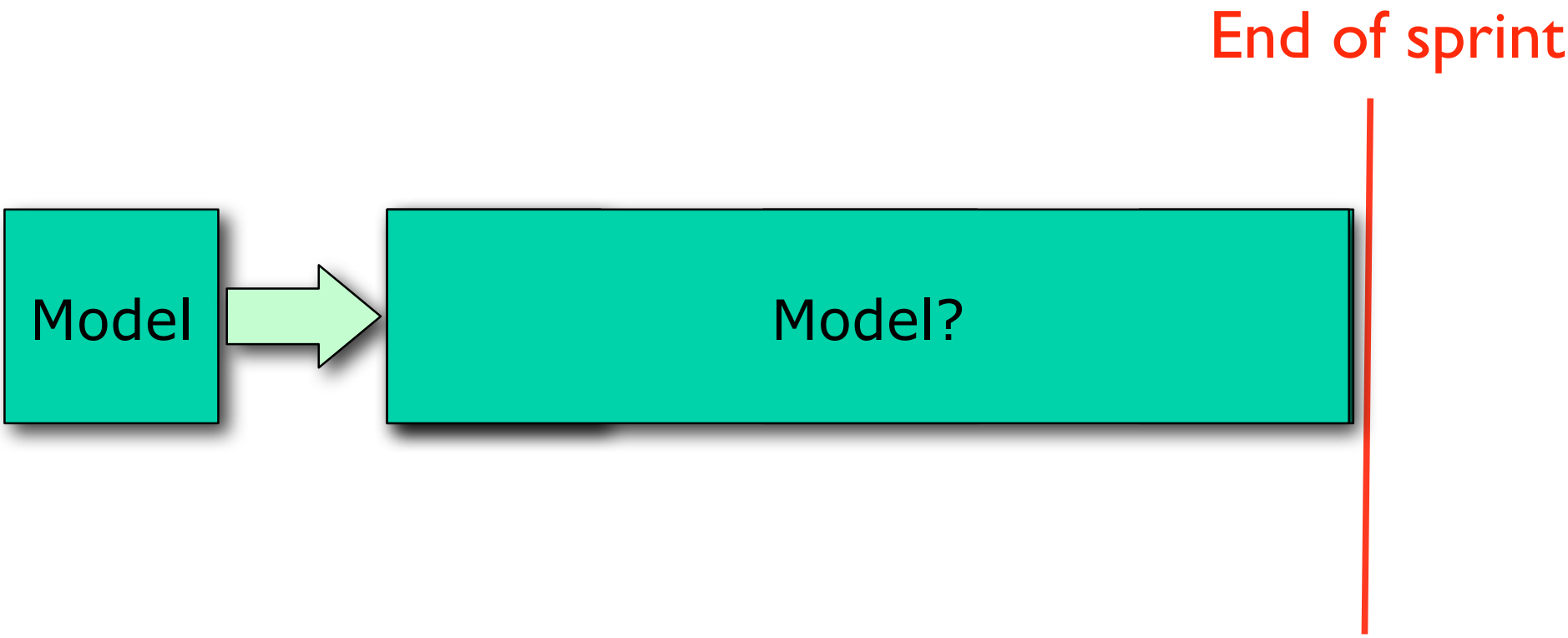
The problem using Scrum for production

Scrum does not represent multi-step workflow transparently.



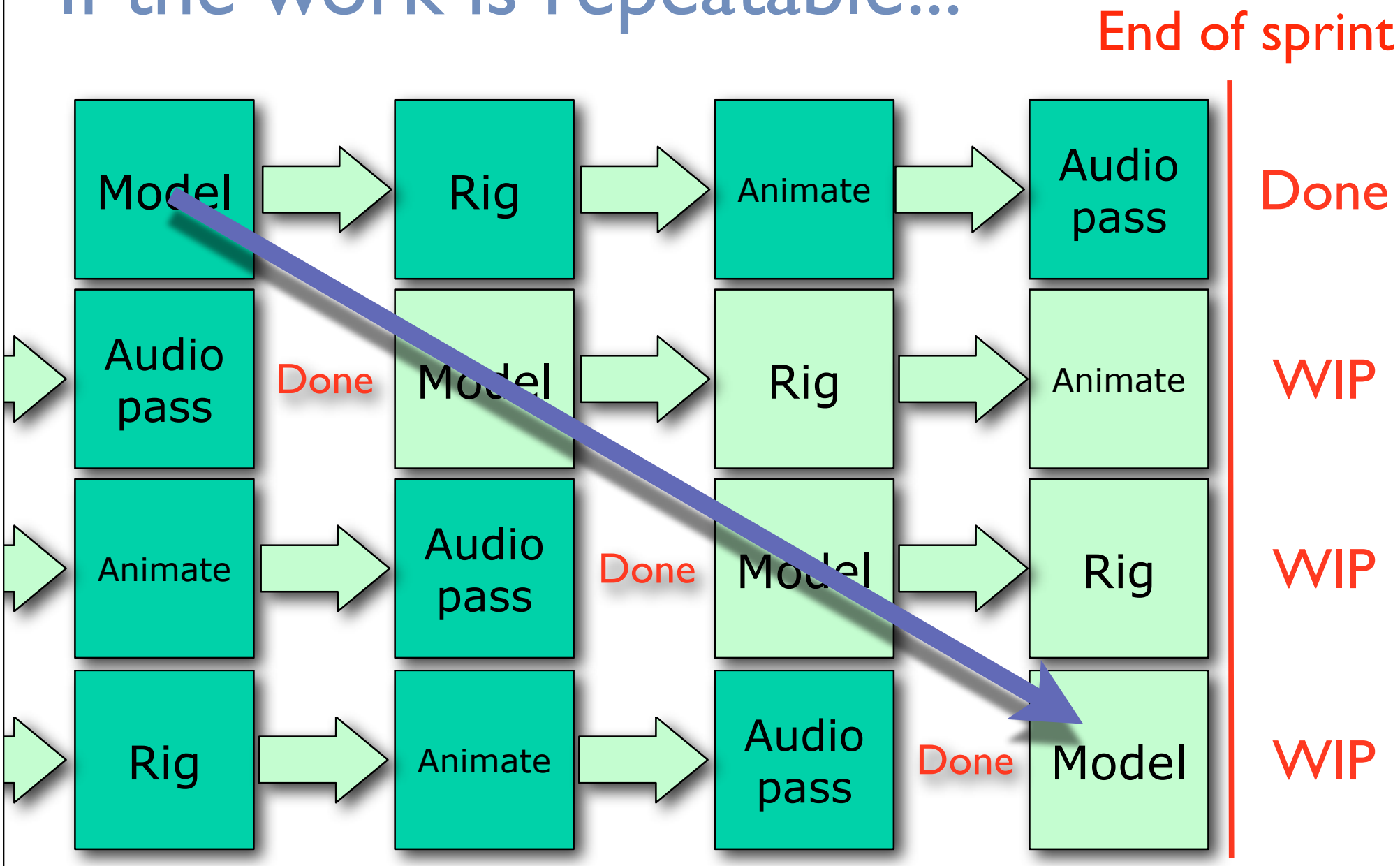
The problem using Scrum for production

Cross-discipline teams cannot share the work evenly



Discipline pools can help, but they promote local optimization, which works against flow

If the work is repeatable...



It should flow

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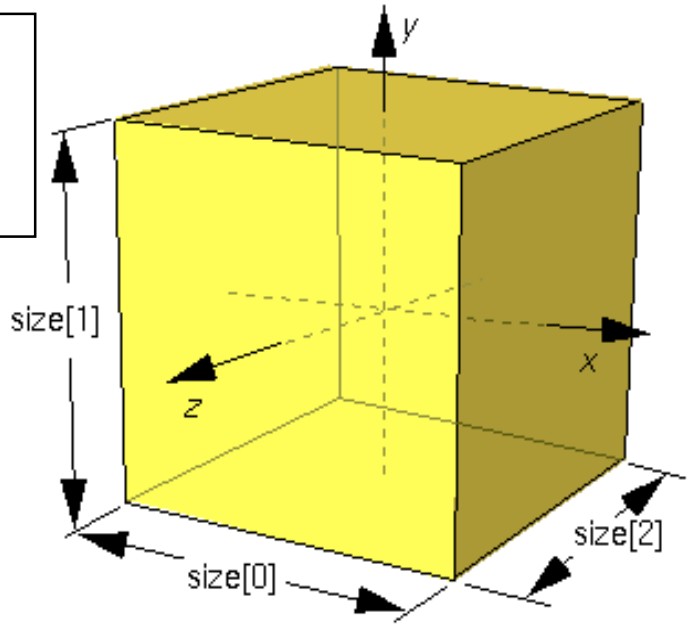
Time-boxing Art

A time-box is a fixed length of time given to produce results. The results are variable.



"When forced to work within a strict framework the imagination is taxed to its utmost-and will produce richest ideas. Given total freedom the work is likely to sprawl."

-TS Eliot

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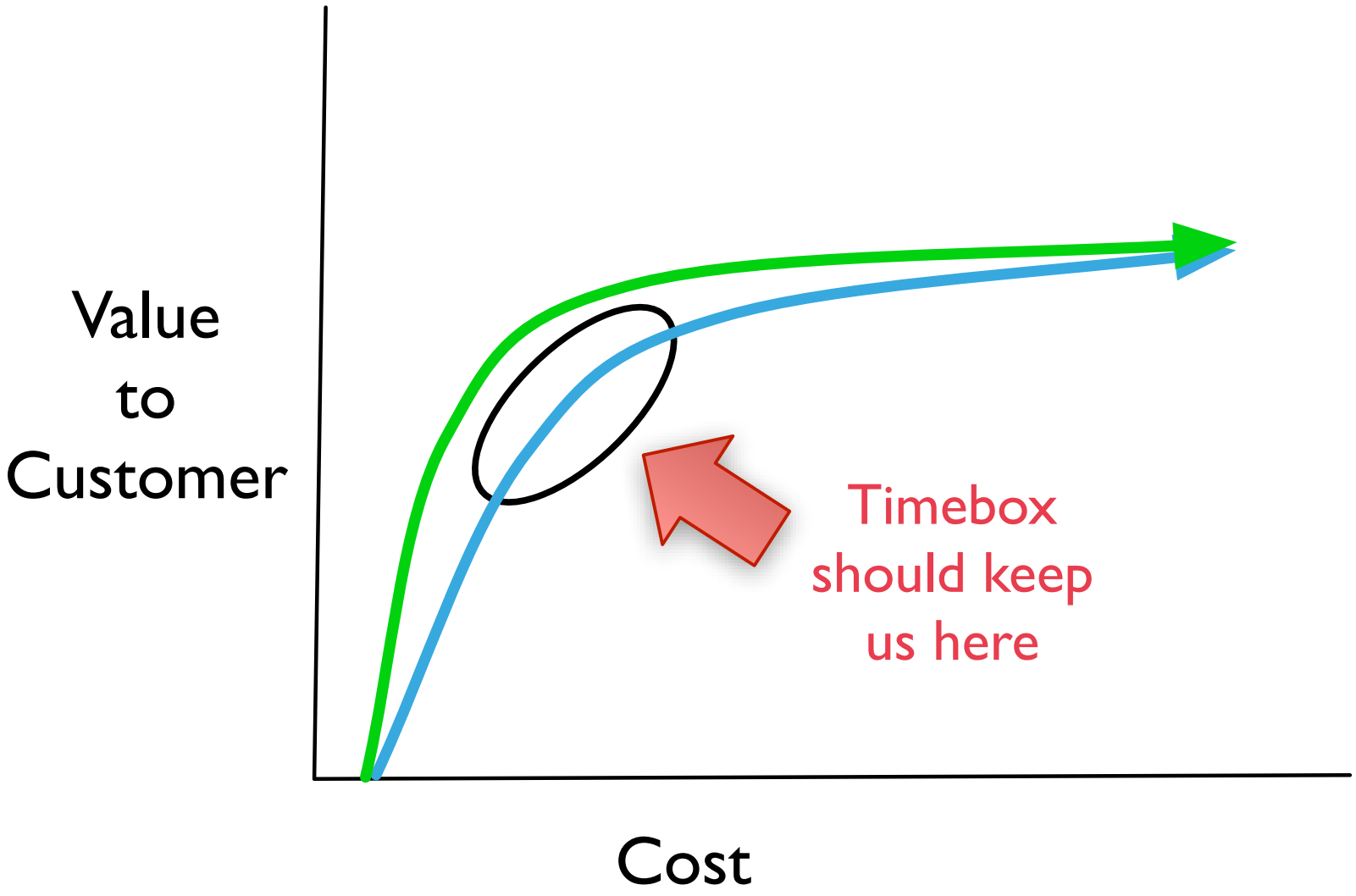
Finding the right timebox



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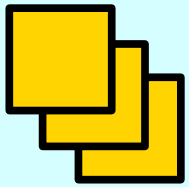
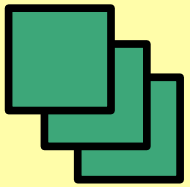
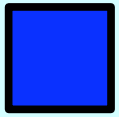
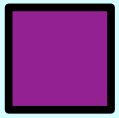
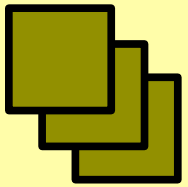
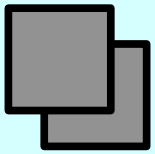
Kanban Board

Concept	Low pass	High rez geometry	Audio layout	Gameplay tuning

Concept and Outline	Low Rez & Layout	High Rez	Audio	Tuning pass
Billy	Robert	R.J	Carlos	Mike
		Charles		
		Andrea		Scott

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Real world experiences

- Scrum teams experience less crunch
  - If they establish a definition of done
  - If they have a shared vision
- Lean is a better fit for production
  - It's compatible with Scrum
- Success is not determined by agile
  - Vision
  - Talent
  - Teamwork
  - Leadership

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Agile Game Development book

- Fall 2009 release
- ISBN 0321618521
- Currently in 2nd draft
- Want feedback
  - See me after

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Conclusion

- For more information
  - www.AgileGameDevelopment.com
  - www.ClintonKeith.com
    - Onsite workshops
    - Public classes
    - Coaching
    - Info up front
- Questions?

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