

**Economically Sensible Scrum
South Florida Agile Association
Agile Transformation Summit
May 28, 2015
by Ken Rubin**

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✦ Restaurant analogy takeaways

Restaurant and manager failed to grasp fundamental principles of running long-term profitable restaurant chain

Failed to evaluate specific actions in the context of an economic framework based on those principles

Many organizations do good team-level Scrum, yet don't get desired business results because they fail to grasp the fundamental principles that underlie Scrum and how those principles should be used in an economically sensible way



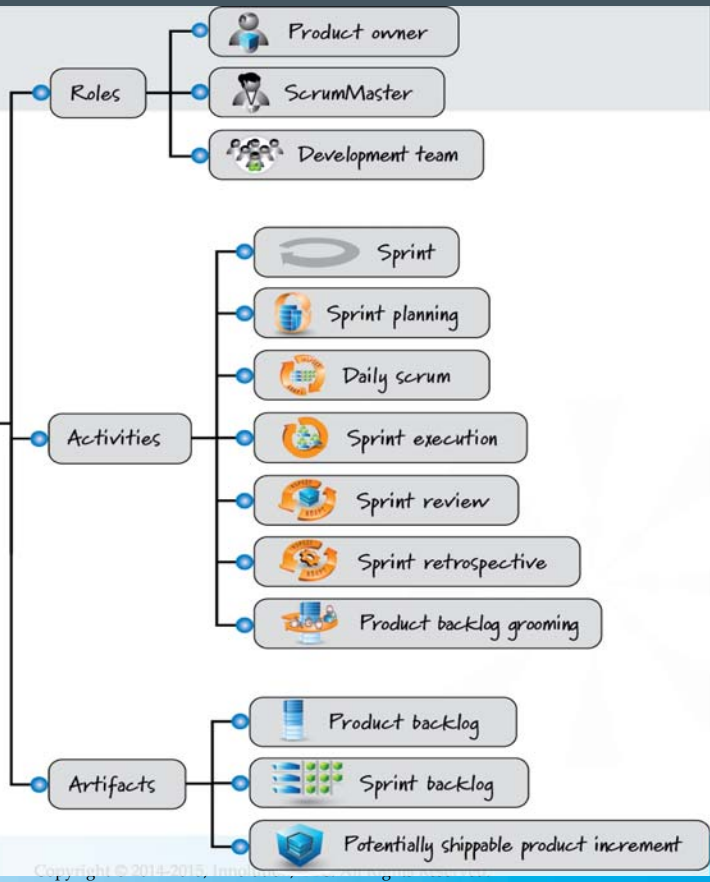
✦ Scrum framework

Scrum isn't sufficient for success,
Economically Sensible Scrum is





Scrum practices



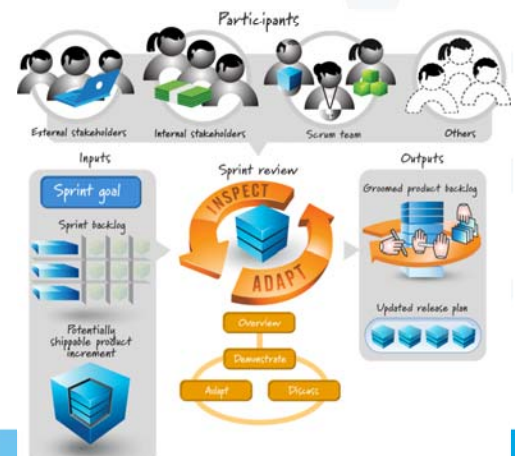
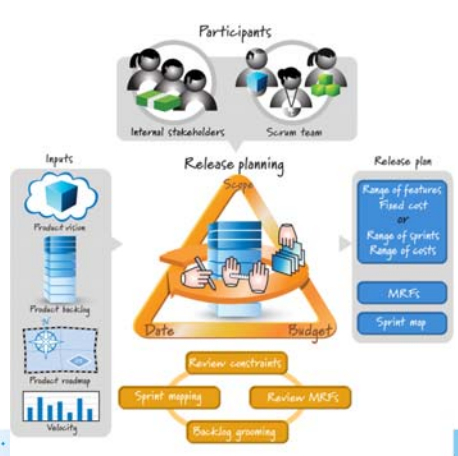
Approaches

Upload File

As a wiki user I want to upload a file to the wiki so that I can share it with my colleagues.

Conditions of Satisfaction

- Verify with .txt and .doc files
- Verify with .jpg, .gif, and .png files
- Verify with .mp4 files <= 1 GB
- Verify no DRM-restricted files



ScrumBut(t) – violations of the Scrum framework



We do Scrum, but...

Sprints are 8 weeks

No product owner

Daily scrums on M-W-F

Sprint planning is 2 days

Etc...

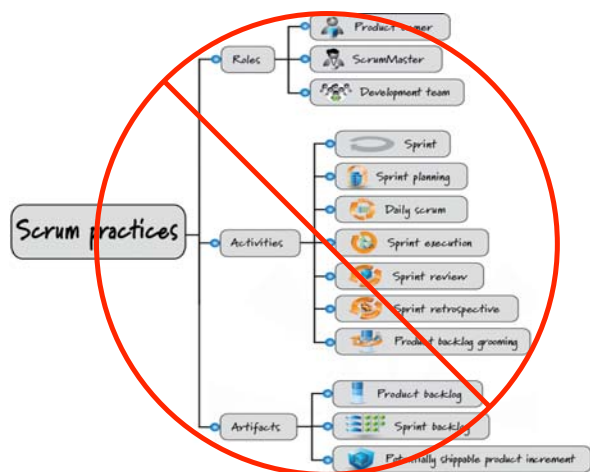


What if there are no Scrum "violations?"

VIOLATION

YOUR USE OF SCRUM VIOLATES A CORE PRACTICE AND IS HEREBY DEEMED TO BE A SCRUMBUT

YOUR TEAM PHOTO HAS BEEN RECORDED



Do no violations = success with Scrum?



Three inhibitors to success using Scrum

Ignorance or misapplication of core agile principles during development

Failure to apply agile principles throughout the value chain

Failure to structure teams in an economically sensible way

Overall, not applying core agile principles in an economically sensible way



Agile principles provide context for inspecting & adapting

People who apply Scrum without understanding its underlying principles lack the necessary context to understand why they are doing things and when and how best to inspect and adapt their approaches

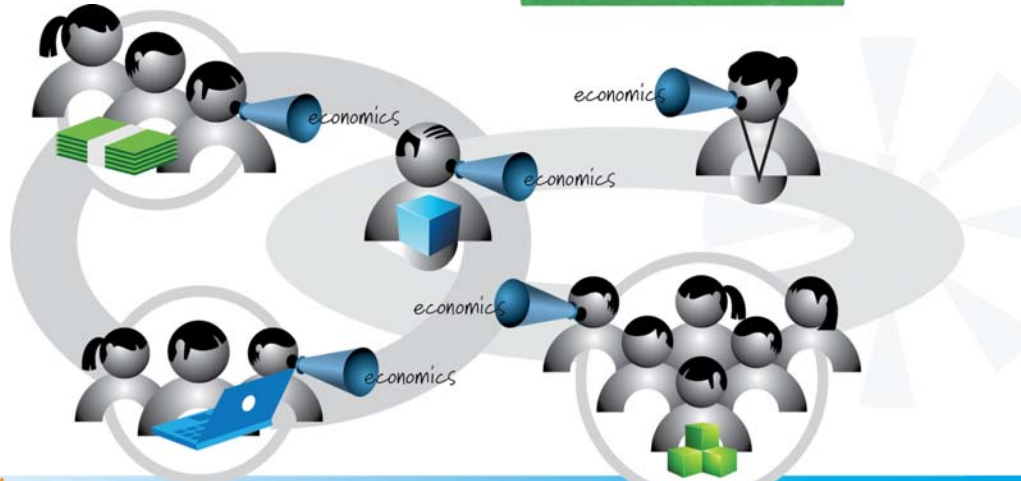
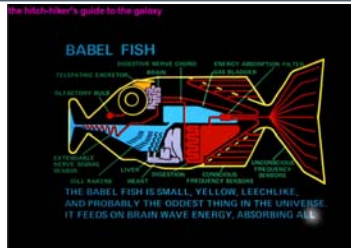


Economically sensible scrum

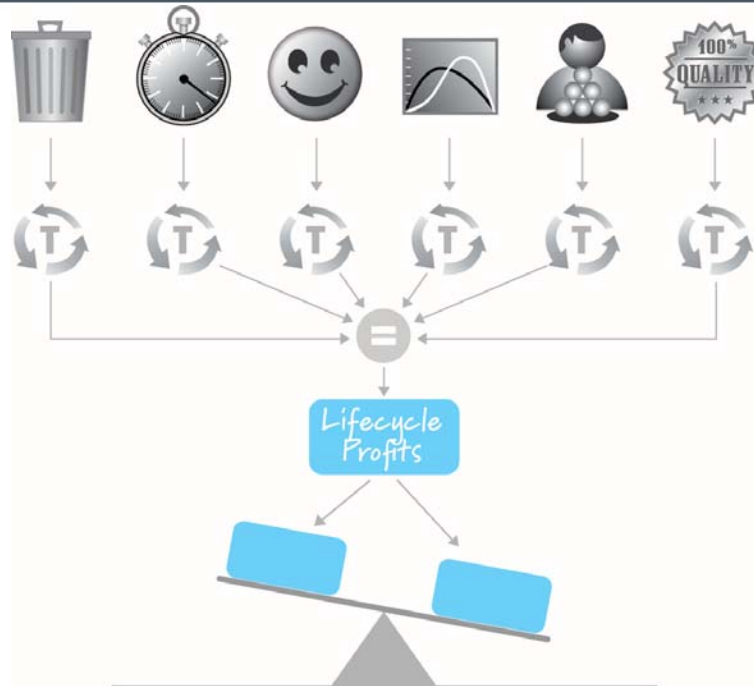


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Economics – universal language of product development



✱ We need an economic framework

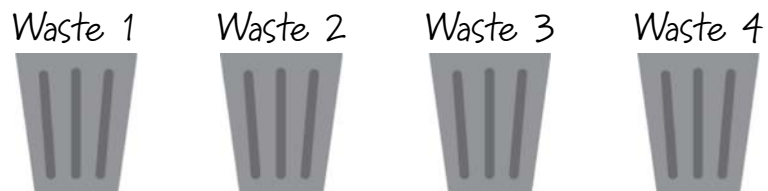


Based on Reinertsen "The Principles of Product Development Flow: Second Generation Lean Product Development"

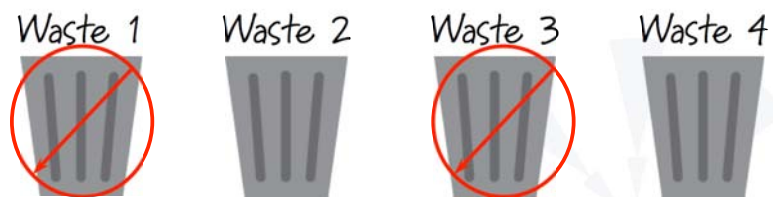


✱ Example: waste

Multiple forms of waste



Can't eliminate them all



Determine which cause most economic damage





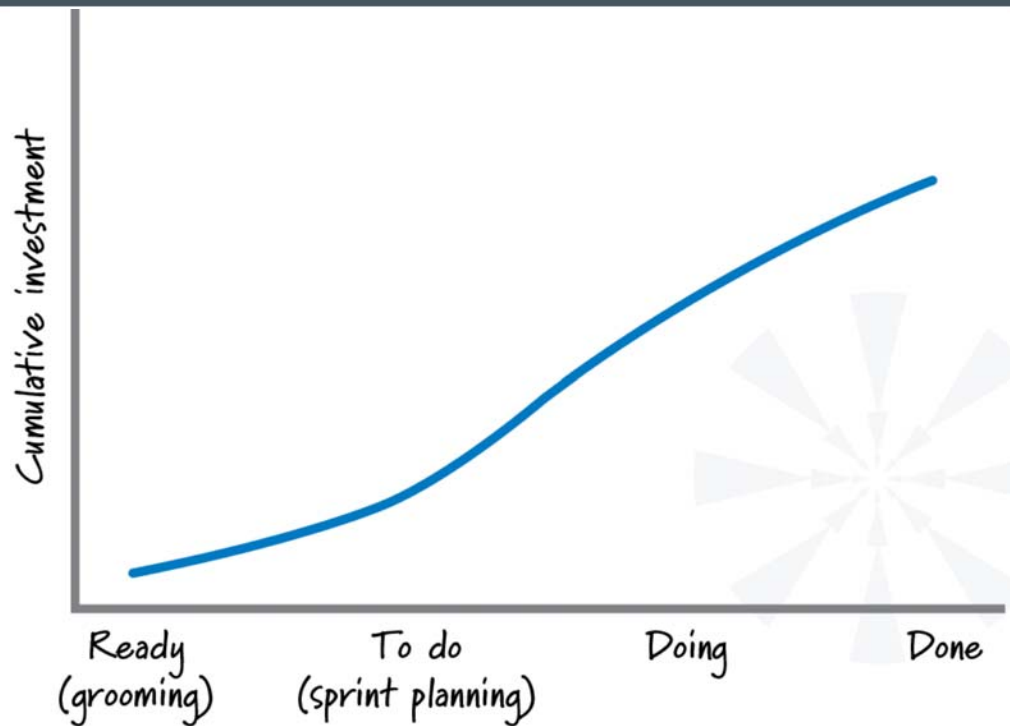
Ignorance or Misapplication of Core Agile Principles During Development



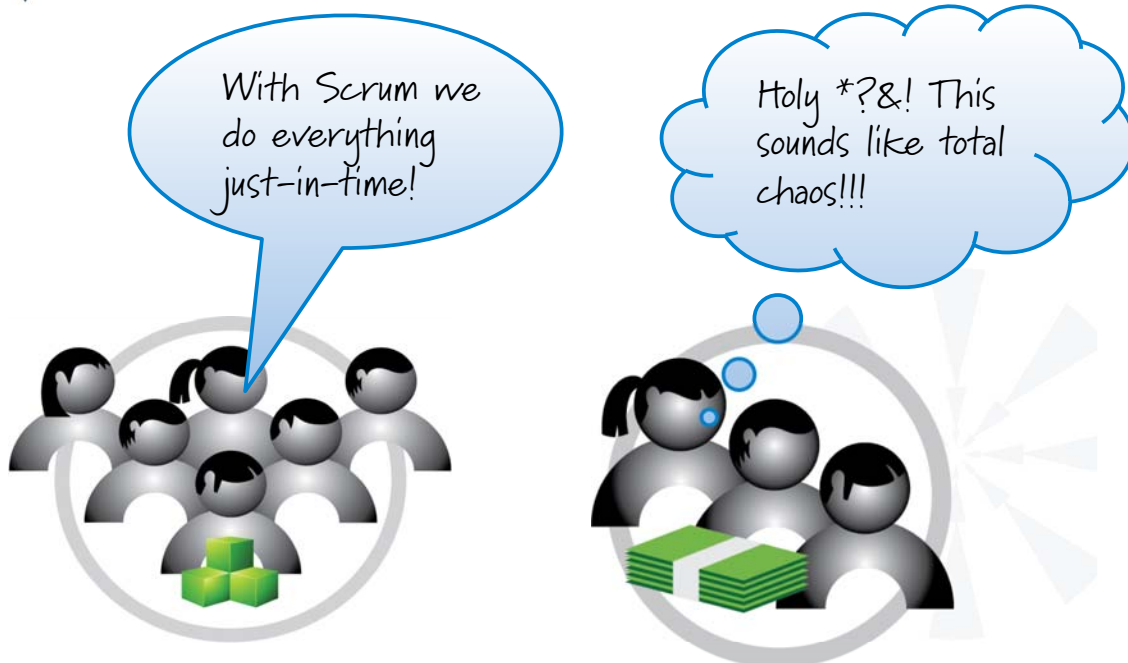
Misunderstanding of when change occurs



✦ Economically sensible change

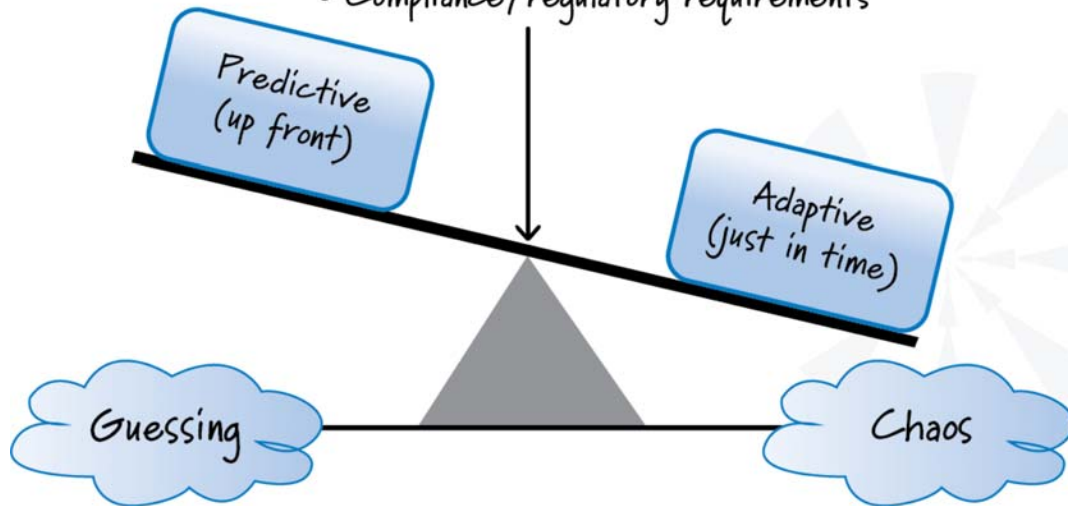


✦ Misunderstanding of just-in-time



Balance up front predictive with adaptive just in time

- Type of product
- Degree of end uncertainty
- Degree of means uncertainty
- Constraints on development
- Compliance/regulatory requirements

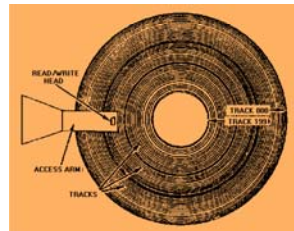


Recognize inventory (WIP) waste

Manufacturing inventory is both physically and financially visible

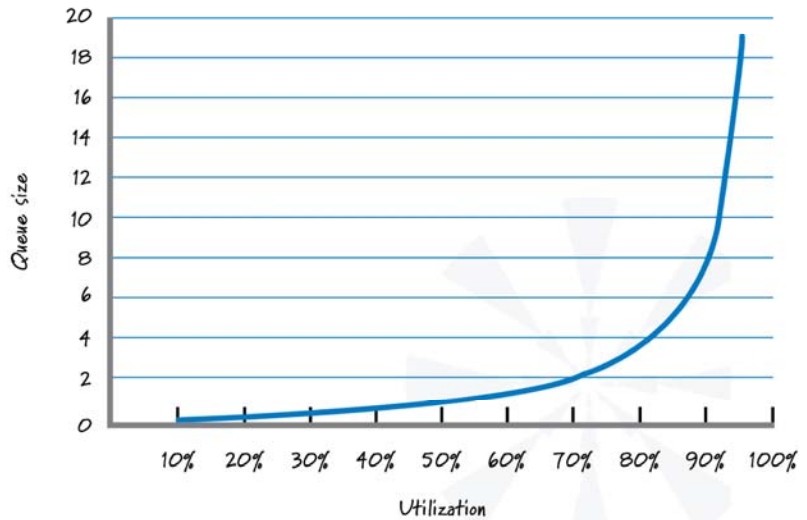


Product-development inventory is knowledge assets that are physically and financially invisible



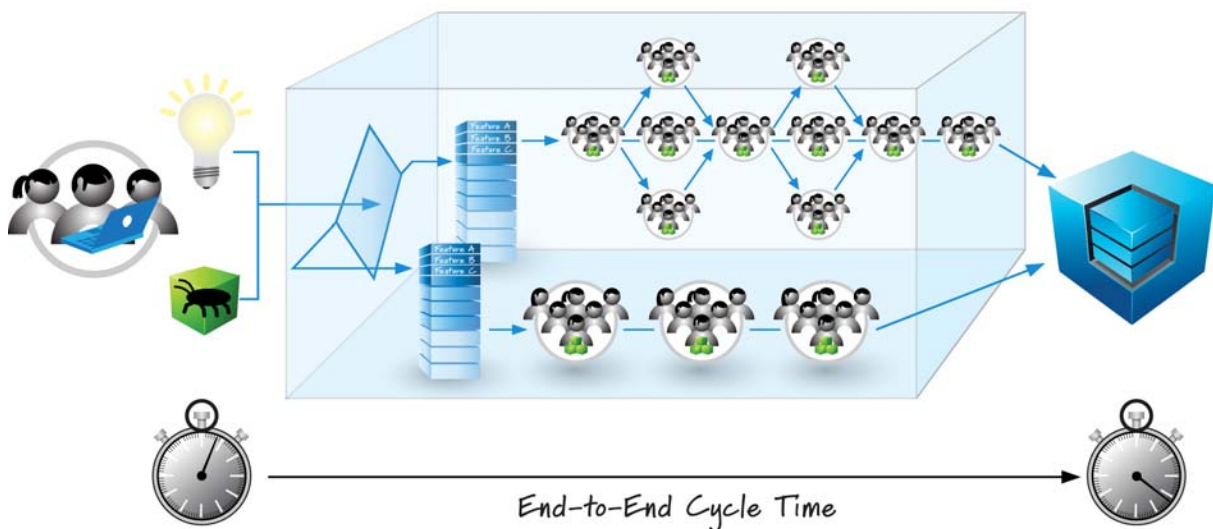
Focus on idle work not idle workers

Watch the Baton Not the Runners

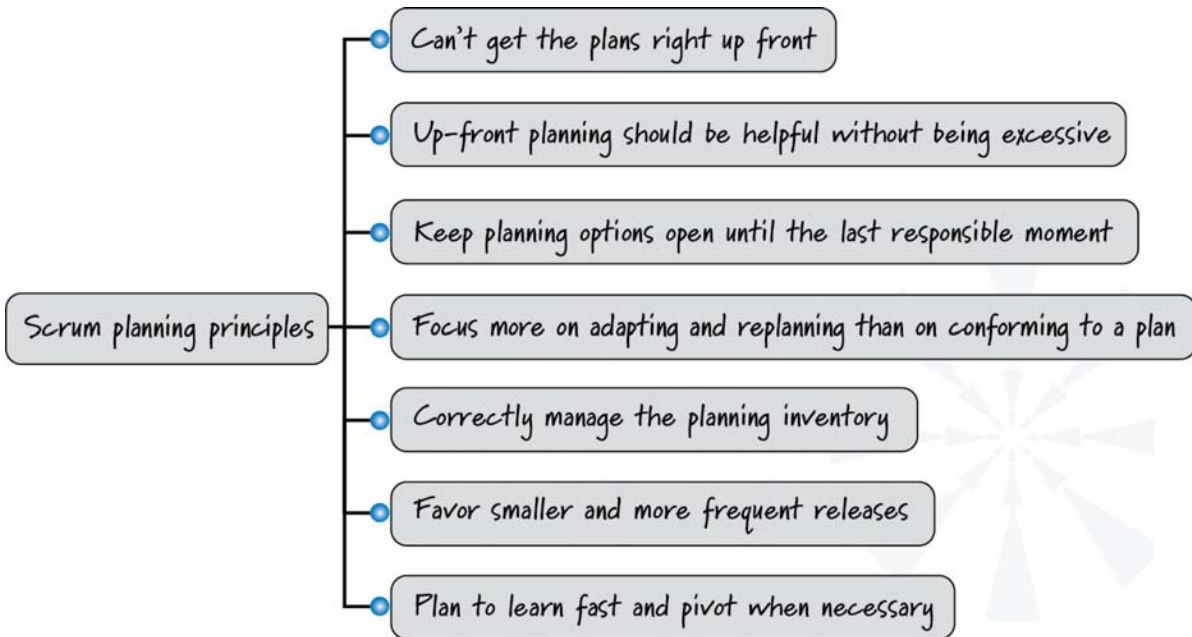


Fast, flexible flow

System of teams working together to deliver business value quickly



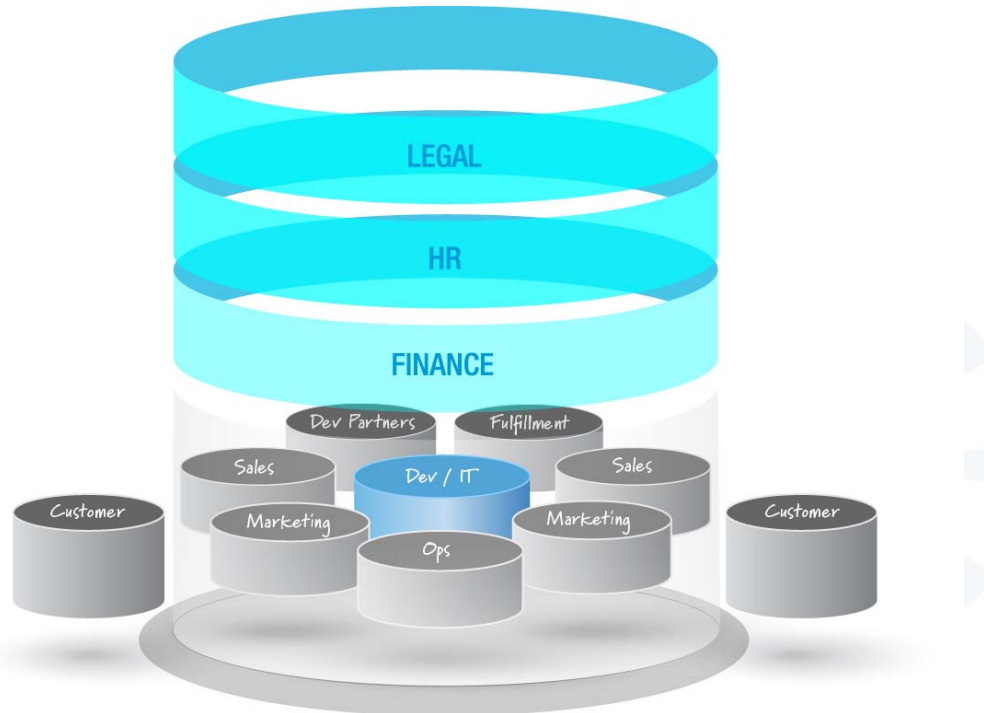
* Economically sensible planning



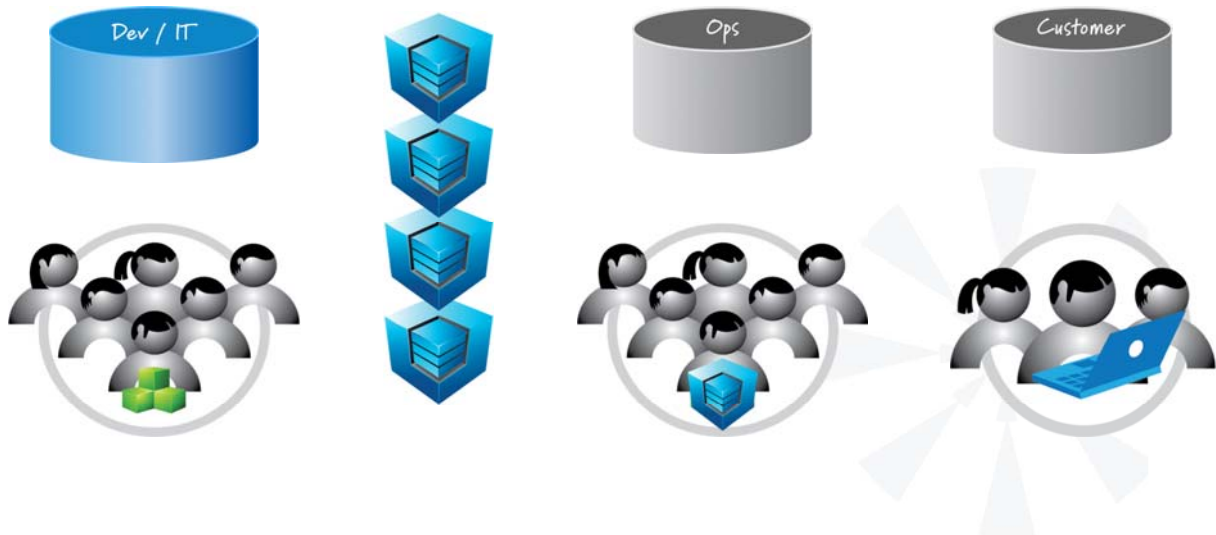
**Failure to Apply
Scrum Principles
Throughout the
Value Chain**



Example value chain

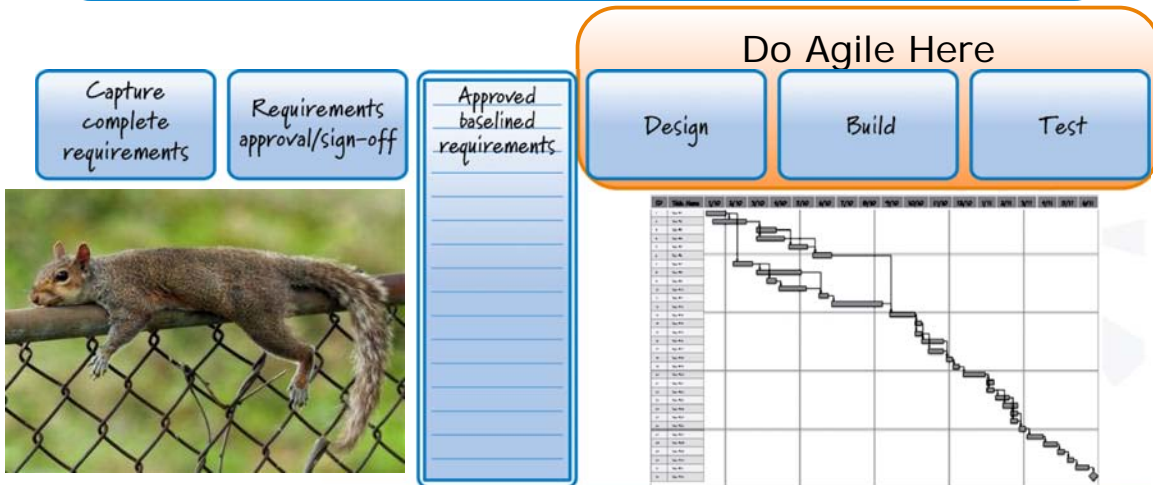


Downstream misaligned

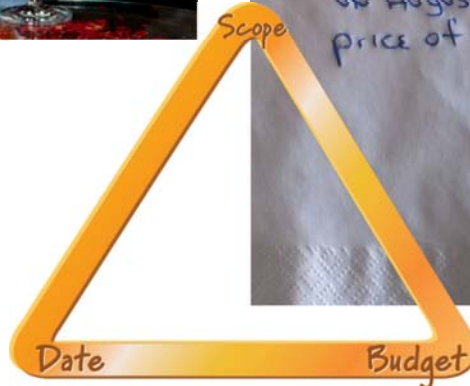
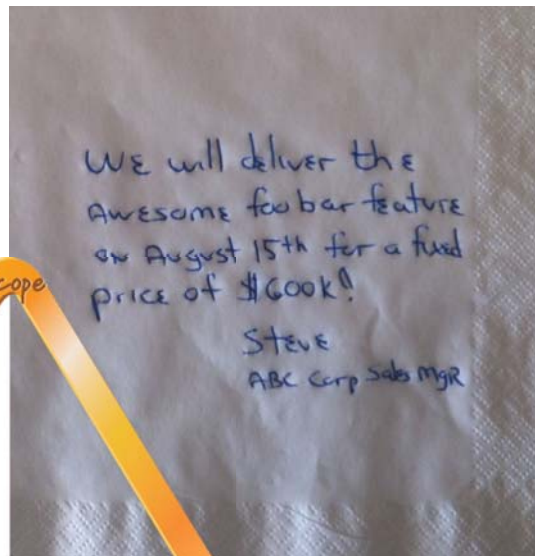


✦ Internal management misaligned

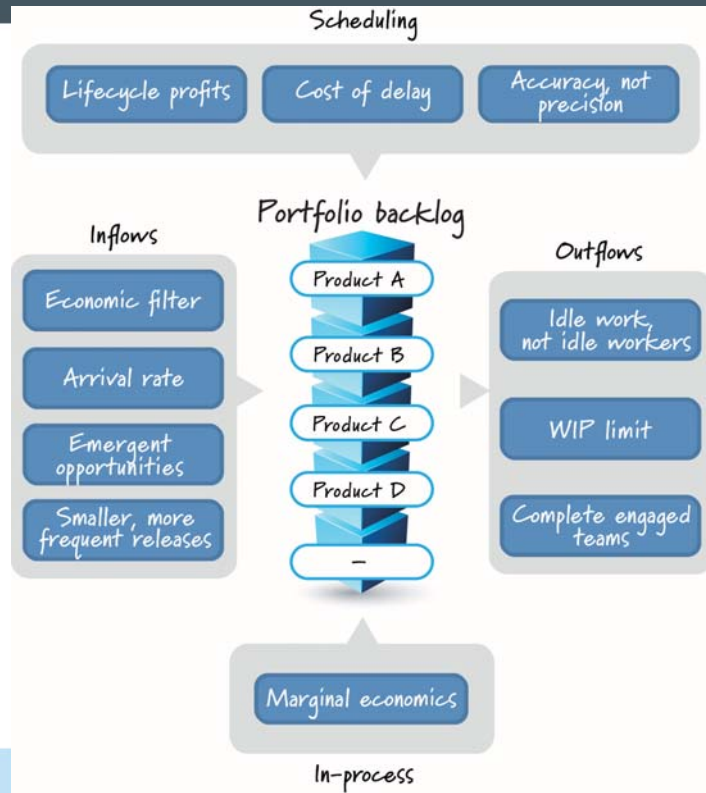
Develop in an Agile way, but still provide all of the same plan-driven artifacts (e.g., extensive up-front requirements, full budget, and precise schedule) like before to get the project approved



✦ Sales Misaligned

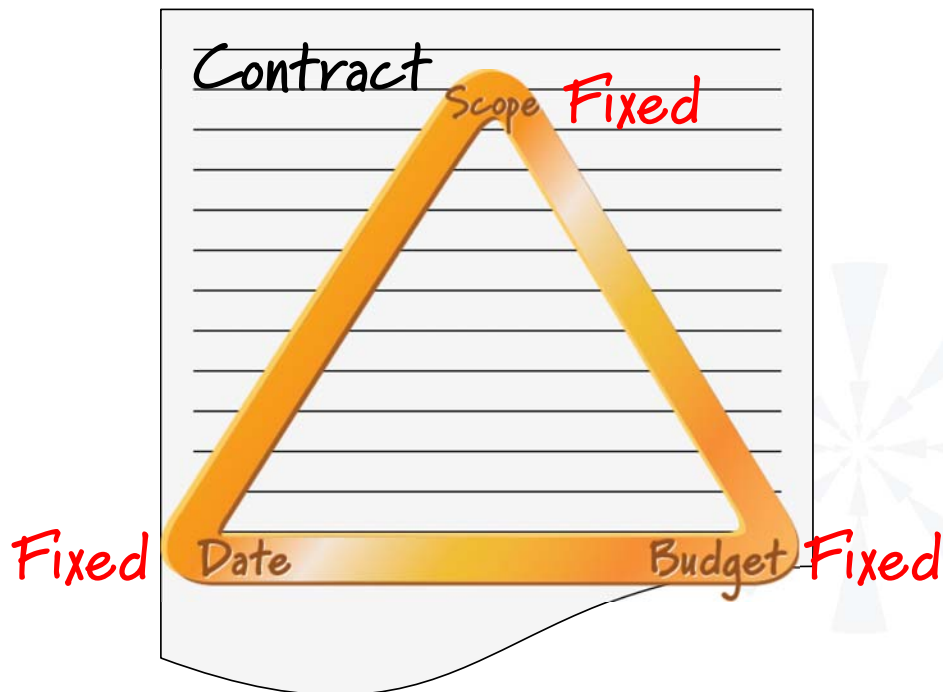


Portfolio planning misaligned



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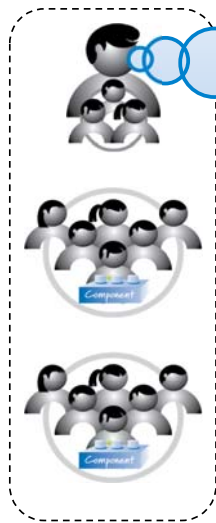
Partners misaligned



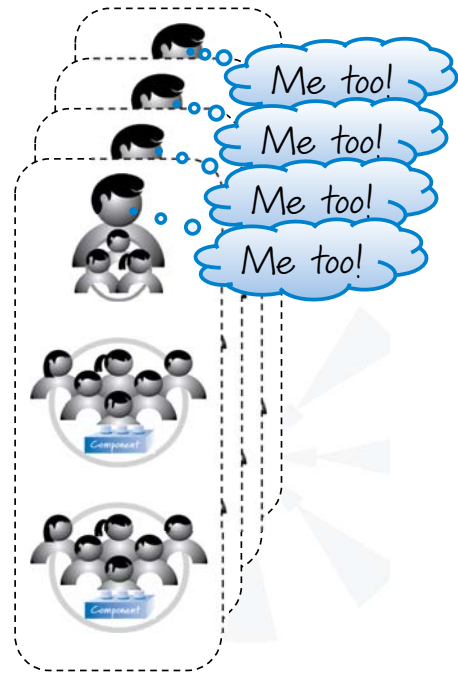
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✦ Protection of the fiefdoms

George's Group

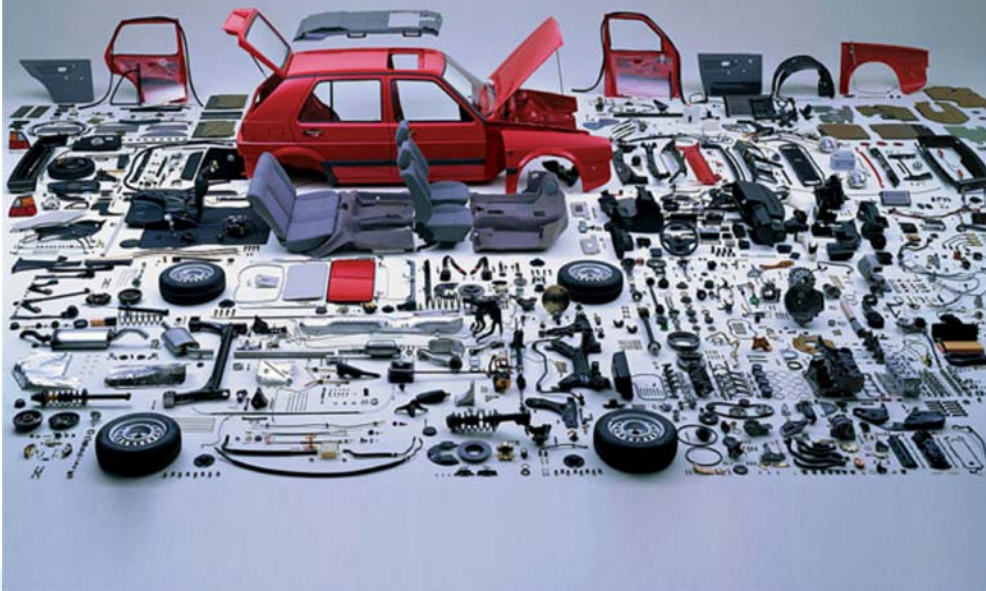


Sure, we can do Scrum, as long as I don't have to change anything in my group!



✦ Failure to see the whole

Optimizing locally frequently sub-optimizes the system





Failure to Structure Teams in an Economically Sensible Way



Economically sensible teaming

Reduce multitasking

Embrace T-shaped skills

Create and maintain long-lived teams

Scaling teams based on economics, not dogma



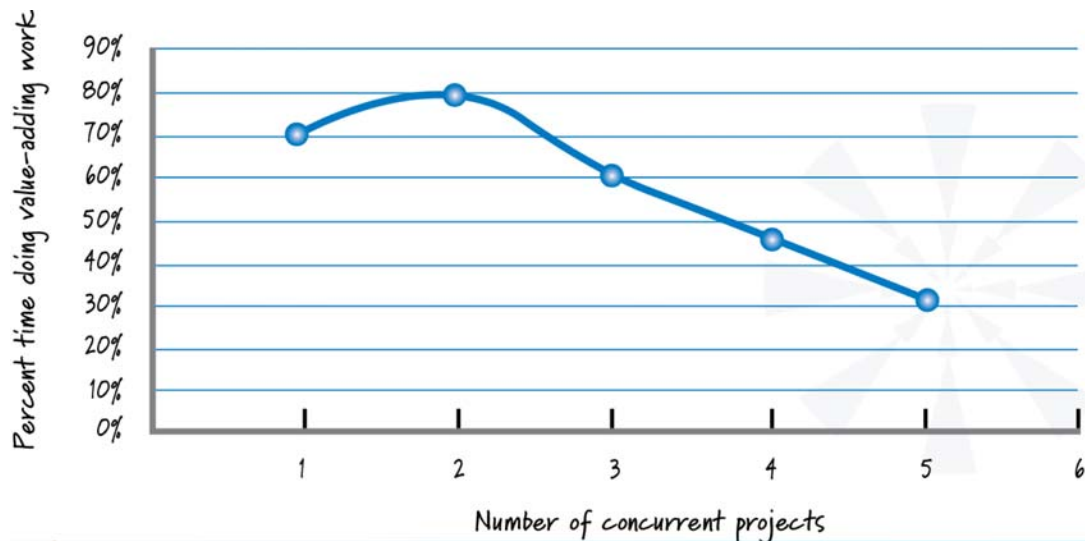
✦ Reduce the amount of multitasking

Not about keeping people busy

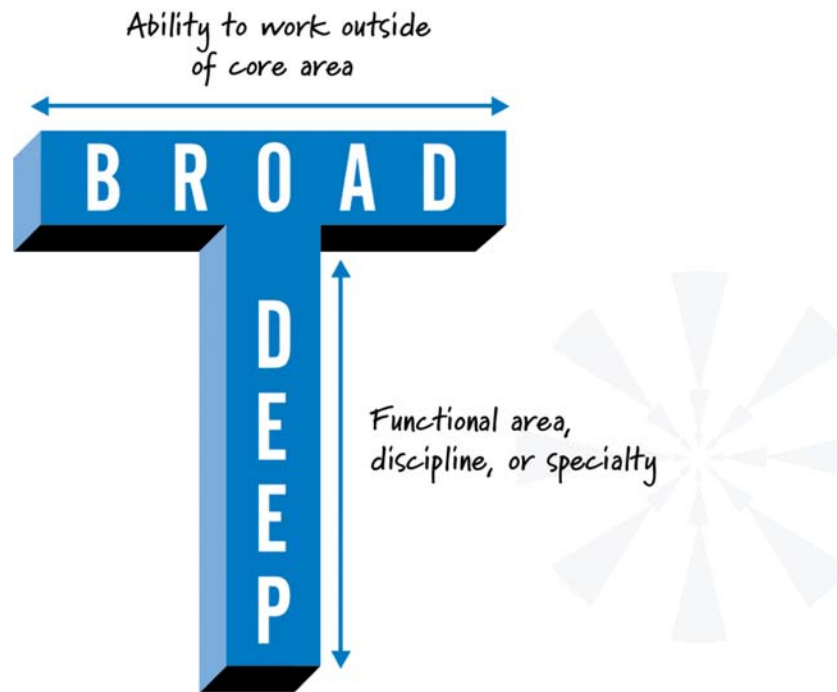


✦ Cost of multitasking

Clark and Wheelwright (1992) studied multi-tasking and determined that when working on more than **two projects**, a person's time spent on value-adding work drops rapidly



☀ Teams with T-Shaped skills



☀ Economics favor long-lived teams

Have established trust and team identity and integrity

More productive than newly formed groups

Team familiarity can positively impact efficiency and quality of team output

Has a shared velocity and estimating history that can be used during planning

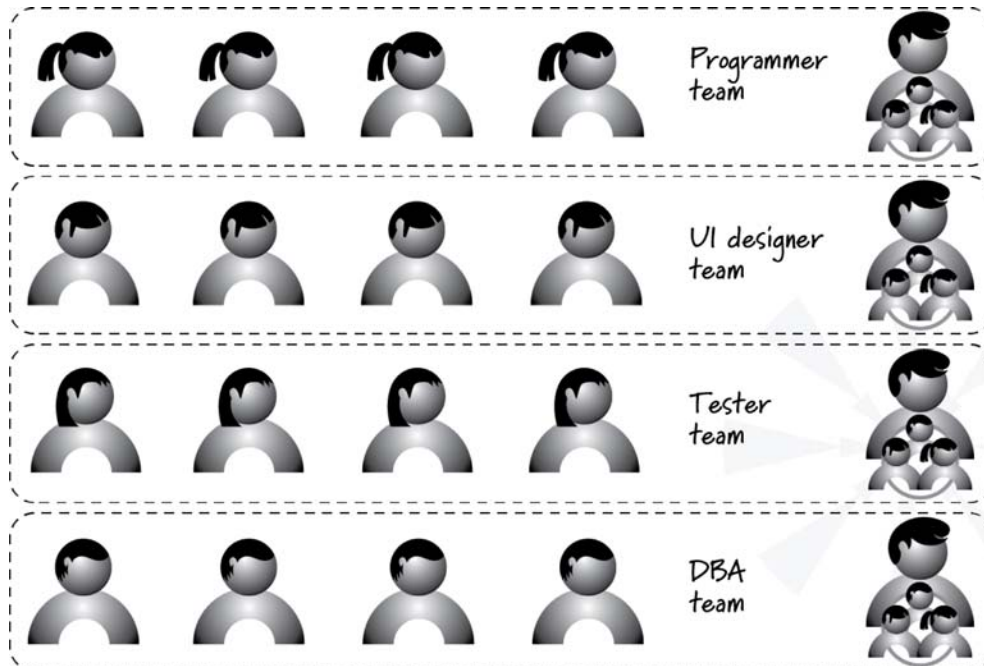


✦ Scaling with multiple teams

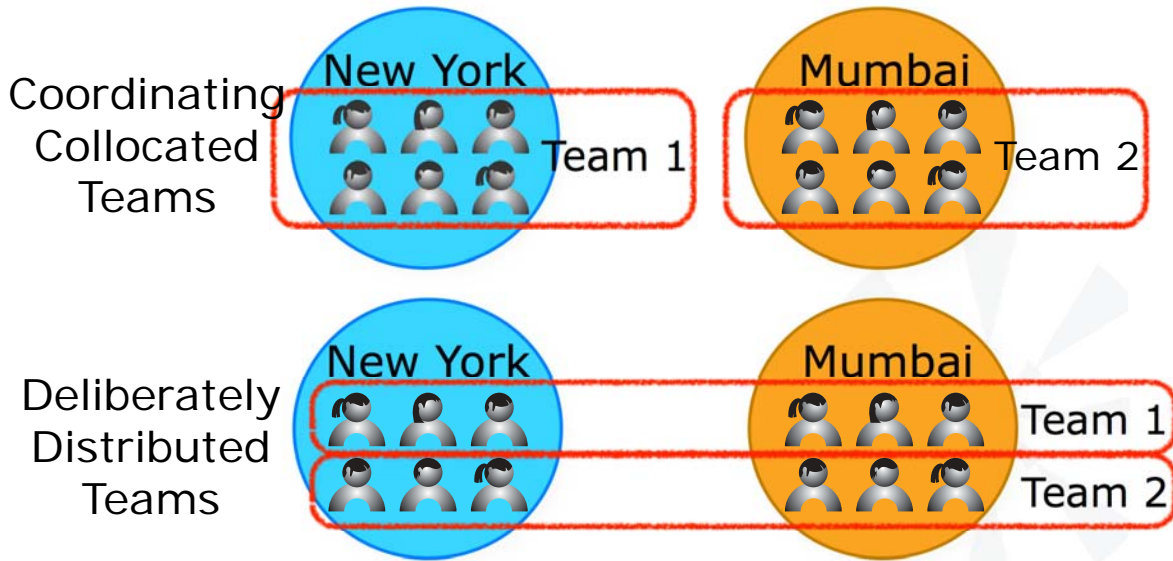
As the scope of work gets larger and one team is no longer sufficient, what is your scaling strategy?



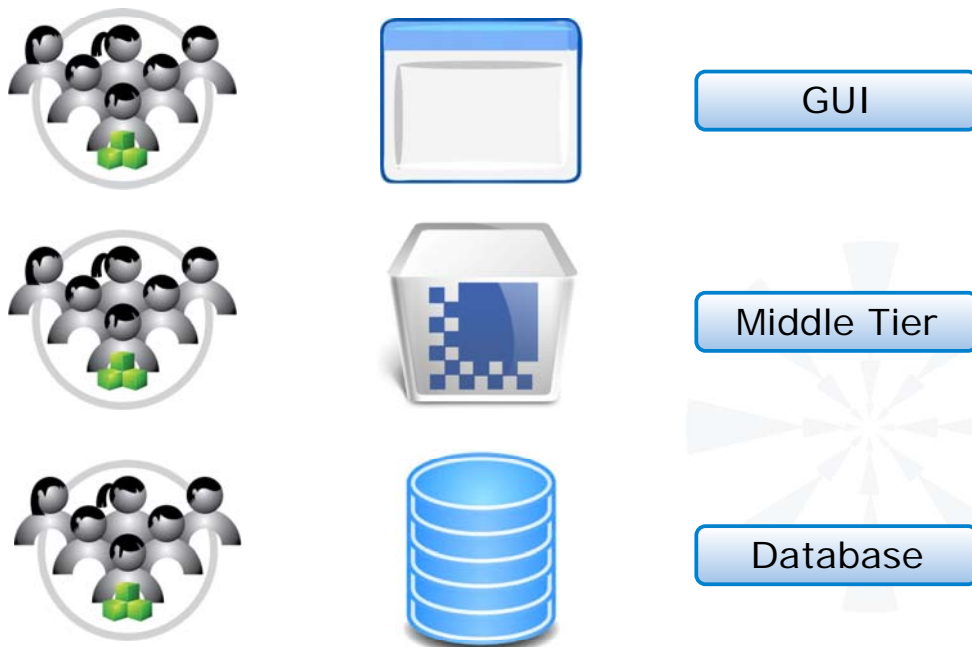
✦ Discipline teams



Location teams



Architectural layer teams



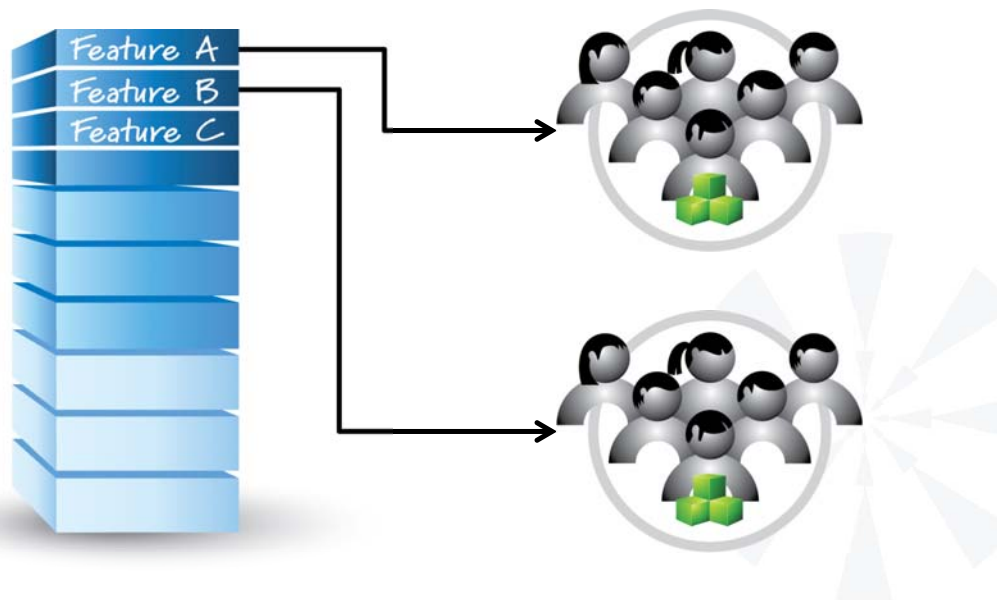
Component teams



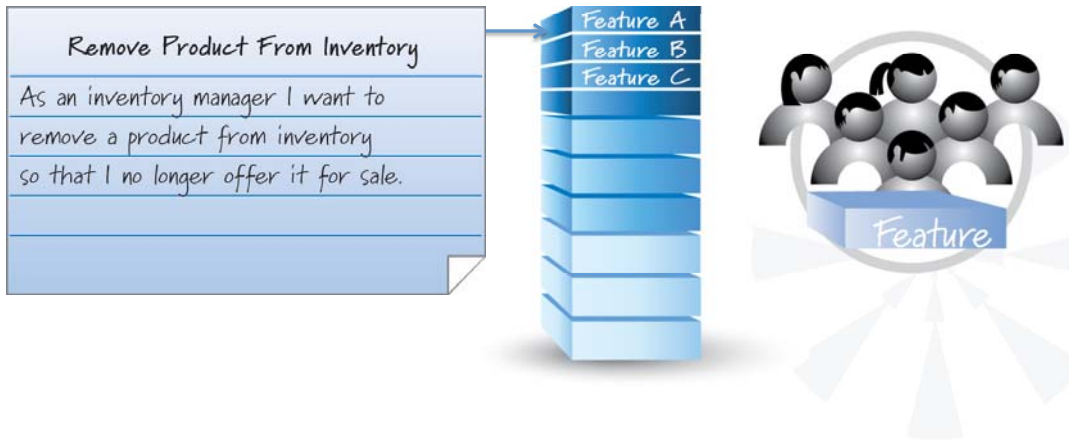
Example component: Routing algorithms (component) inside of a GPS



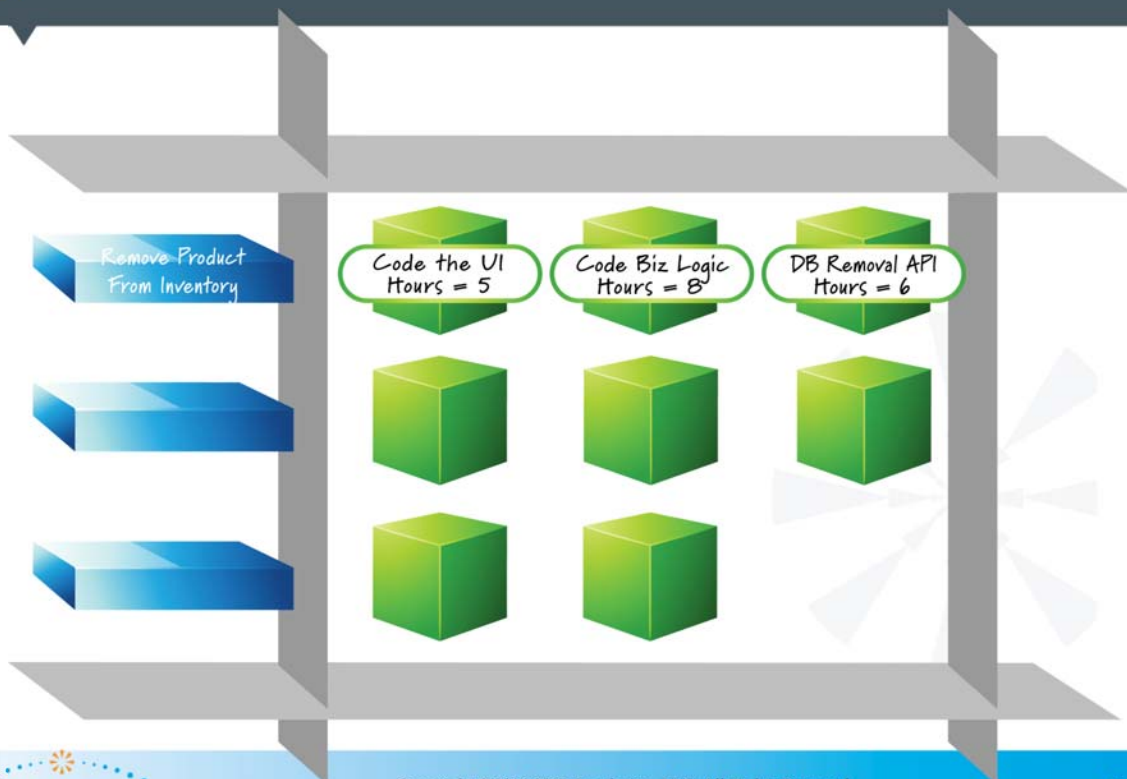
Feature teams



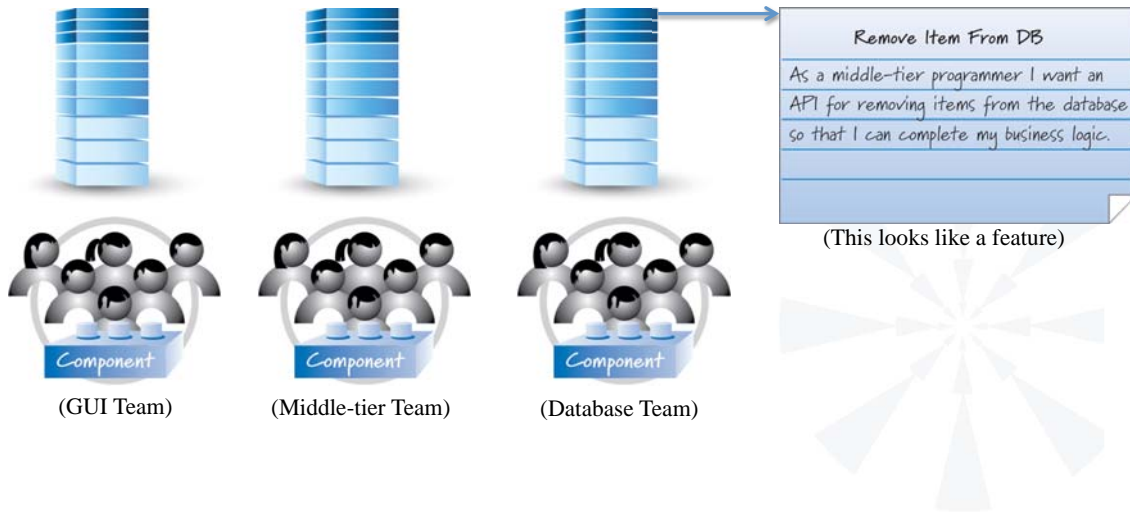
Example feature team working on end-customer feature



Feature team tasks

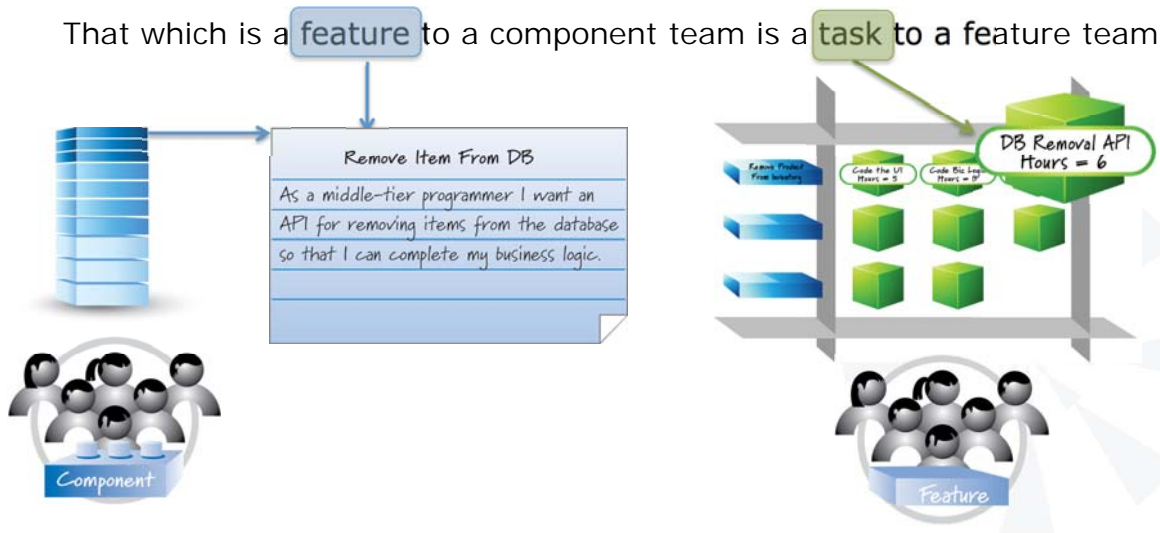


Example "feature" to a component team

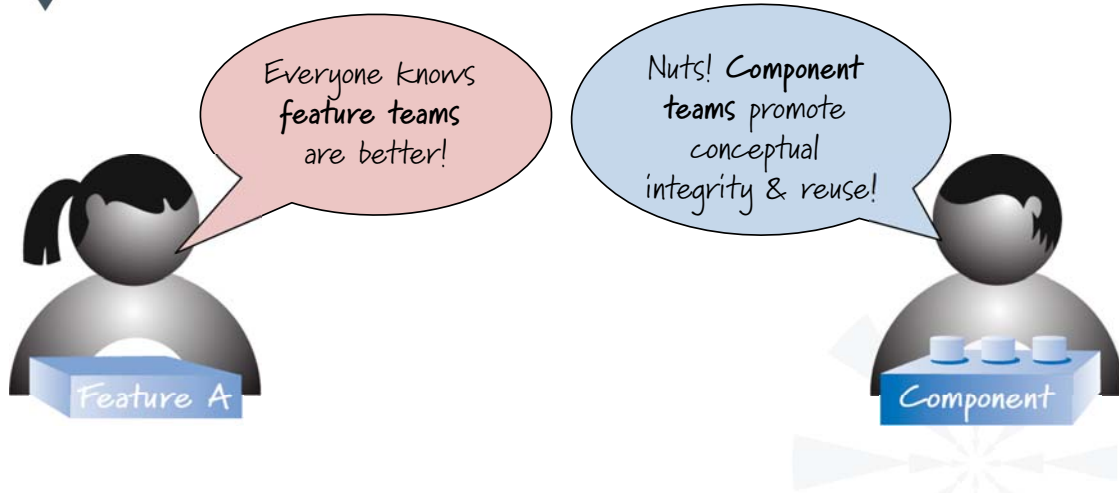


That which is a feature to a component team is a task to a feature team

That which is a **feature** to a component team is a **task** to a feature team



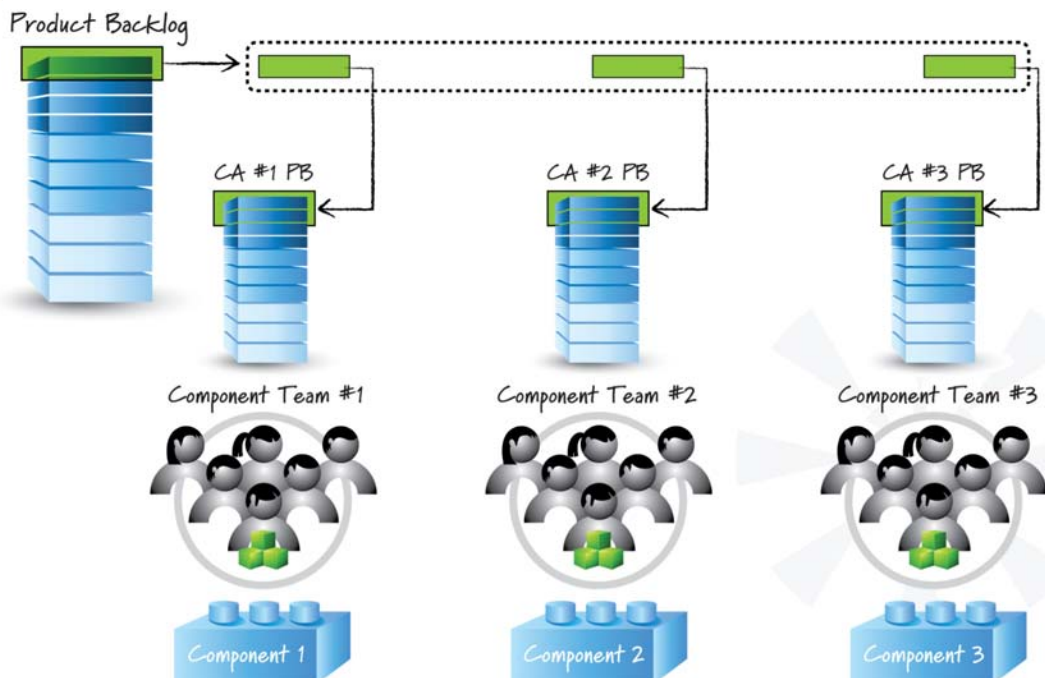
✦ Don't scale based on dogma!



Do you honestly think there is a single answer to scaling that universally applies to all situations (sizes and types of organizations)?



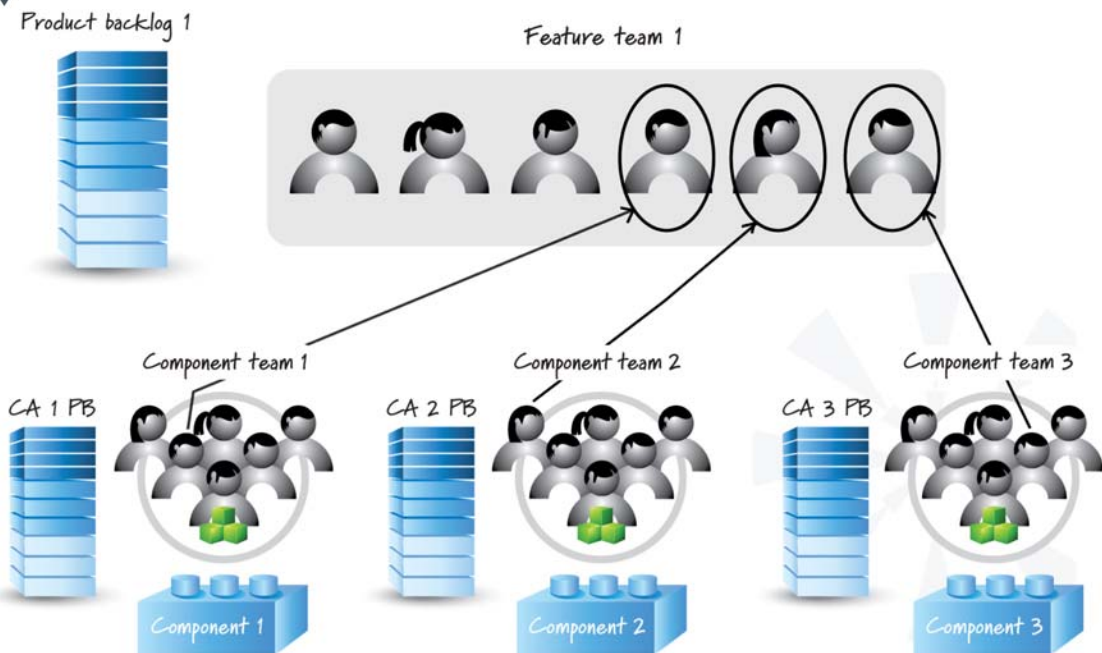
✦ Component teams (single source)



Component teams (multiple sources)

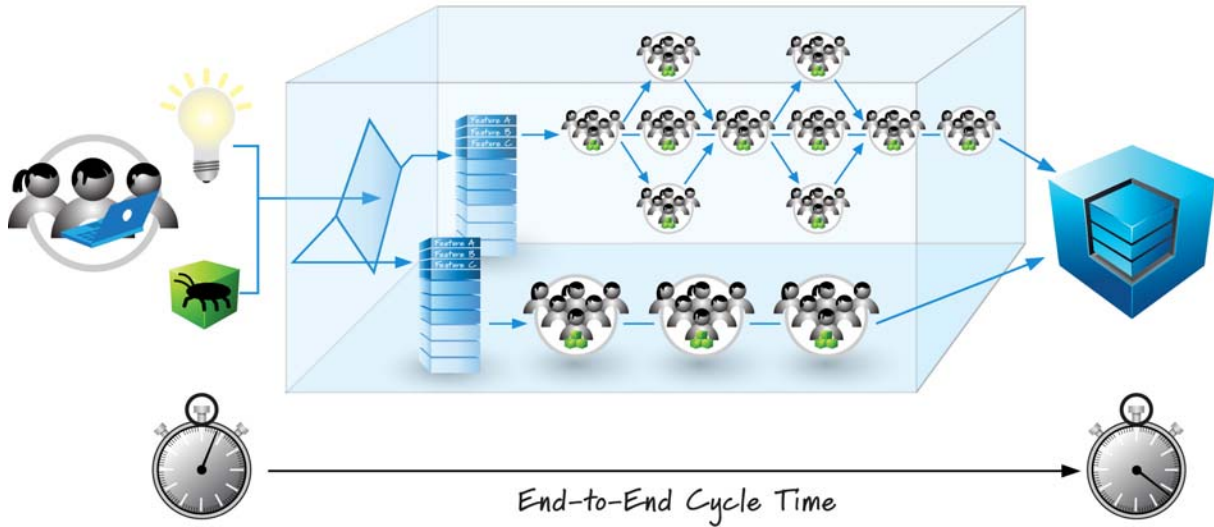


Combined feature & component teams



Fast, flexible flow

System of teams working together to deliver business value quickly



Summary

Performing all Scrum practices...

Need to apply Scrum



using proven approaches...

on foundation of core agile principles



within an economic framework that allows sensible tradeoffs



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