



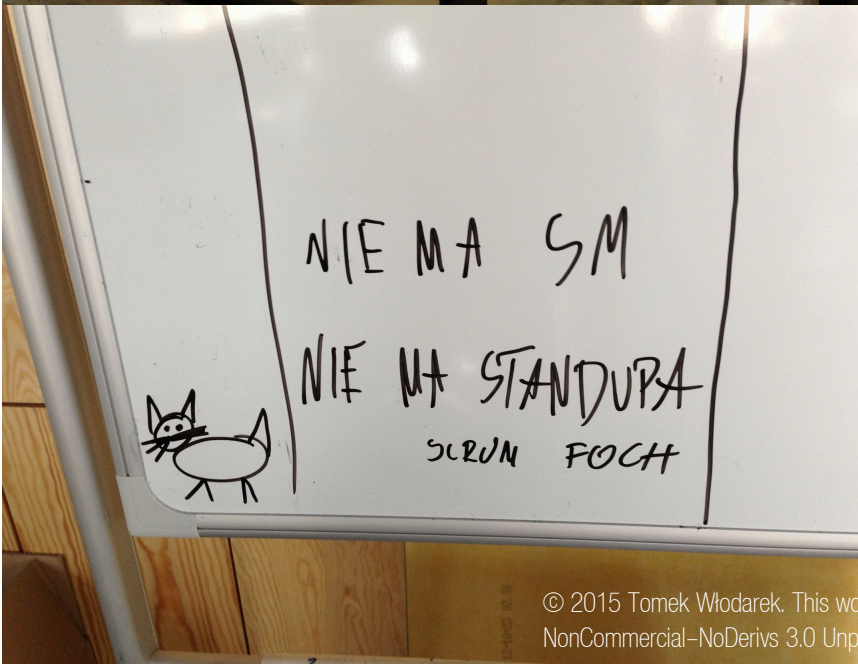
# Scaling Scrum

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# Scaling Scrum

“

If a problem cannot be solved, enlarge it.

**–Dwight D. Eisenhower**

”

how long have you  
been doing Scrum?

more than 5 years

more than 3 years

more than a year

failed or not interested

how long have you  
been actually **using** Scrum?

# discovery framework



Scrum is just a simple framework that will identify everything in an organization that gets in the way of optimally building software. Scrum exposes every cultural dysfunction that impedes developing software.

**–K. Schwaber, J. Sutherland**

Software in 30 Days: How Agile Managers Beat the Odds, Delight Their Customers,  
And Leave Competitors In the Dust



Scrum didn't work out for us,  
but we do love the standups.

A man with a balding head, wearing a red sweater, is sitting in a chair. He has his hands covering his face, suggesting he is frustrated, stressed, or overwhelmed. The background is a simple, light-colored wall with some architectural lines.

half-arsed Scrum  
half-arsed agile

# stam·pede

/stɔm'pi:d/

**1.** */masowy pęd/*

A sudden frenzied rush of panic-stricken animals.

**2.** */uciekać w popłochu/*

To flee in a headlong rush.



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# scale·pede

/skɒl'pi:d/

## 1. */masowy pęd/*

A sudden frenzied rush of panic-stricken companies to scale Scrum because they need more software, now.

## 2. */uciekać w popłochu/*

To flee in a headlong rush to prescribed methods because scaling Scrum is difficult.

# scale·pede

/skʌl'pi:d/

## 1. */masowy pęd/*

A sudden frenzied rush of panic-stricken companies to scale Scrum because they need more software, now.

## 2. */uciekać w popłochu/*

To flee in a headlong rush to ~~prescribed methods~~  
**intellectual fads** because scaling Scrum is difficult.



# what is scaling Scrum?

organizational transformation towards Scrum?

single team working on several projects?

dispersed teams?

multiple teams working on unrelated products?

multiple teams working on unrelated products using a shared code base?

multiple teams working on a product bundle?

# scaling Scrum is...

... any implementation of Scrum where multiple Scrum teams build one product

... any implementation of Scrum where multiple Scrum teams build a product bundle/suite (multiple related products)

how many people have you  
involved?

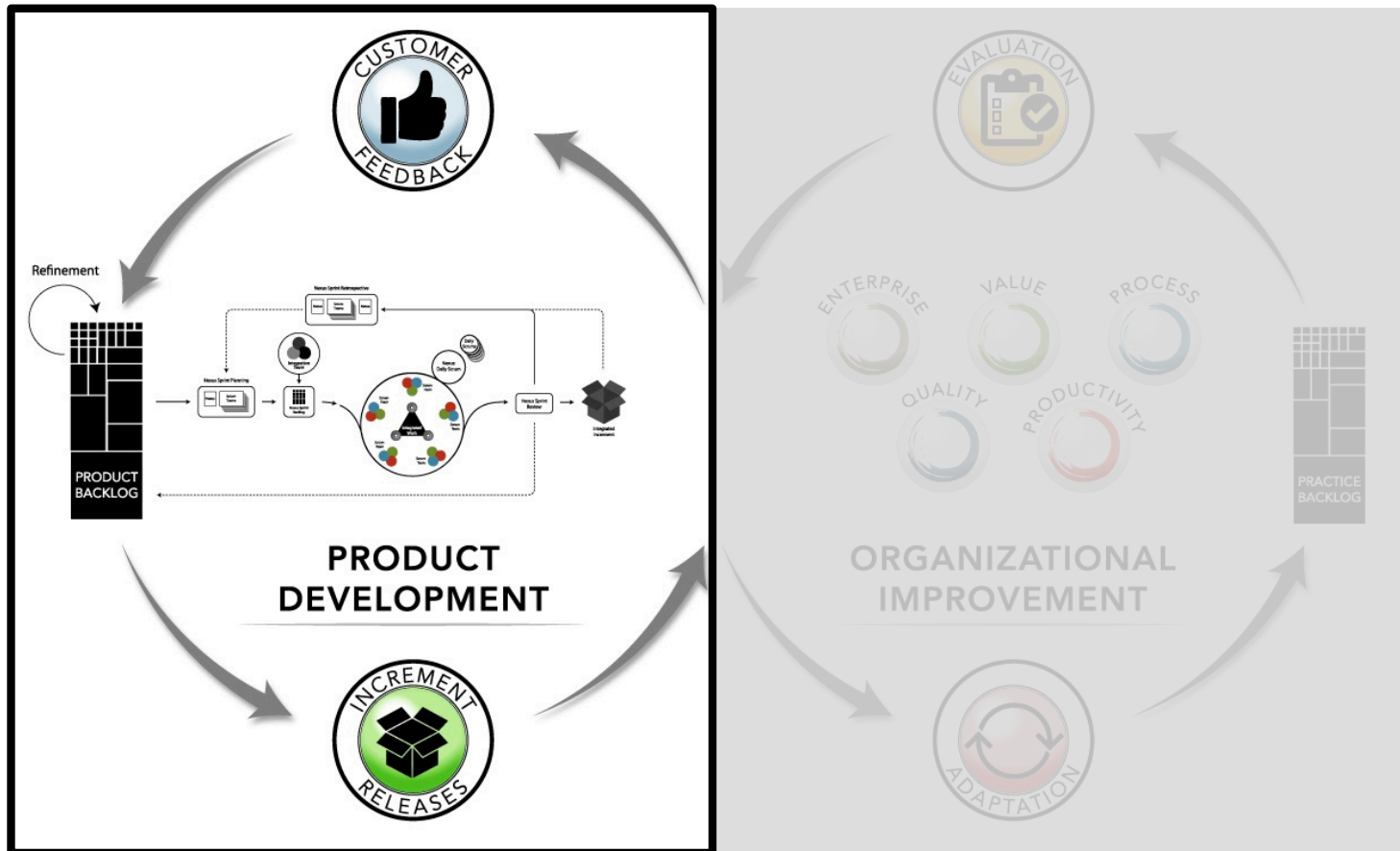
less than 50? (lucky bastards)

50 to 150?

150 to 500?

500 to 1000?

more than a 1000? (OMFG!)



# why to scale Scrum?

excellent results with single teams, desire to gain similar benefits from larger groups? or

we are so damn inefficient we simply **need**  
**more and more people to bloody have**  
**the work done**



# linearity fallacy

(when it is assumed that a phenomenon functions linearly, overlooking important factors that may produce non-linearity; nothing is linear in the software development world – complex adaptive systems aren't causal)

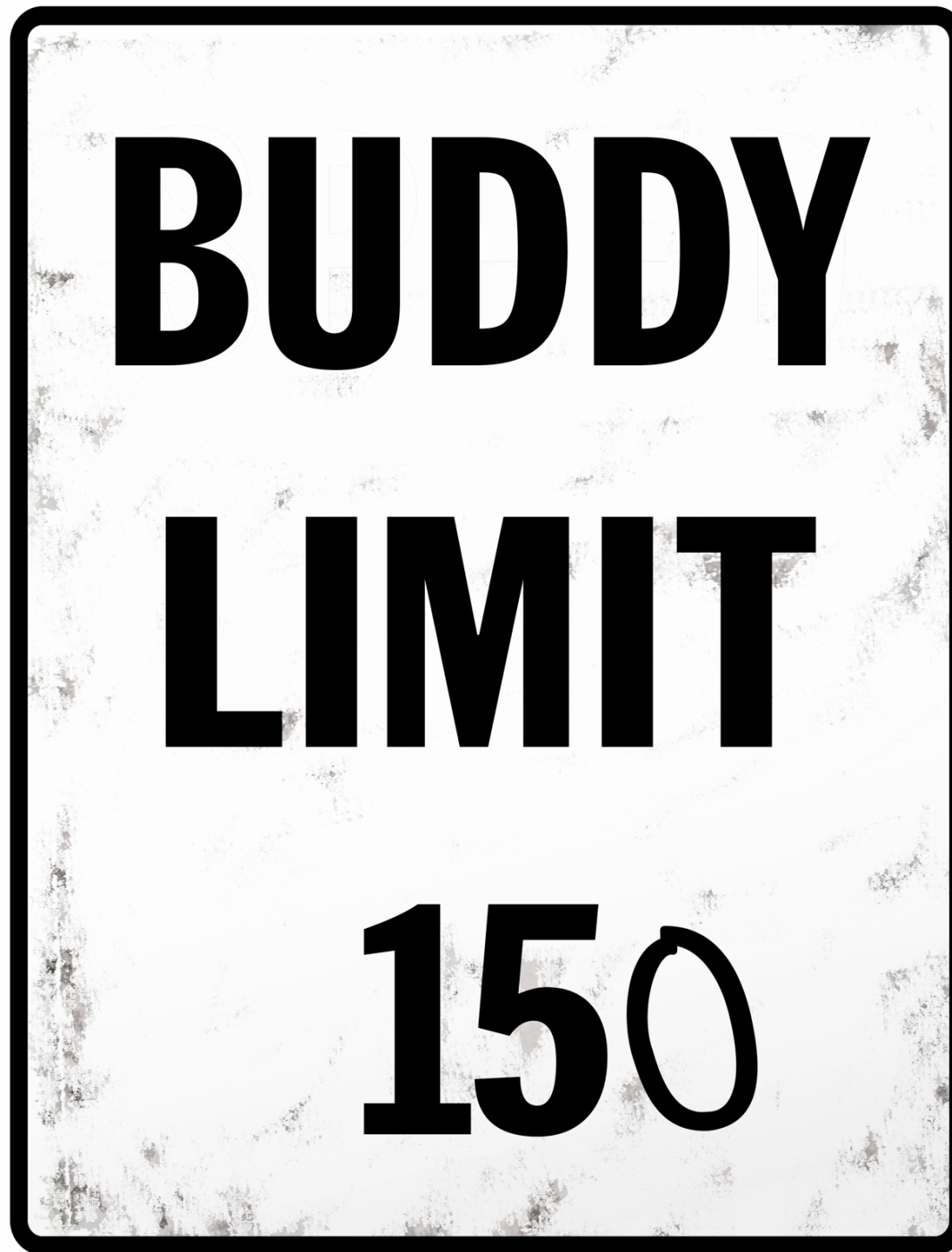
what are the two biggest  
hurdles when scaling Scrum?

# communication dependencies

what causes most scaling  
efforts fail?

# communication dependencies

indivi  
over



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“

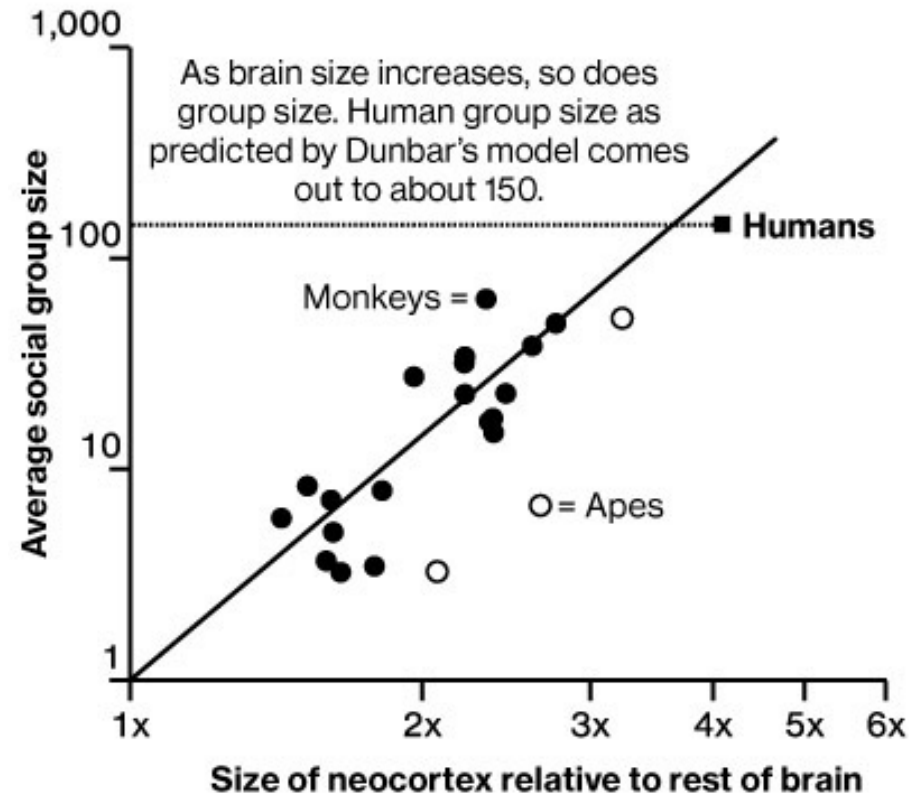
[for most of us] it's a cognitive challenge  
to keep track of more [than 150] people.

**–Robin Dunbar**

<https://www.youtube.com/watch?v=ppLFce5uZ3I>  
<https://stevelekson.files.wordpress.com/2011/08/dunbar-neocortex-size-and-group-size.pdf>

”

## The Social Cortex





“

Any organization that designs a system will inevitably produce a design whose structure is a copy of the organization's communication structure.

**–Melvin Conway**

<http://www.melconway.com/research/committees.html>  
<http://hbswk.hbs.edu/item/5894.html>

”



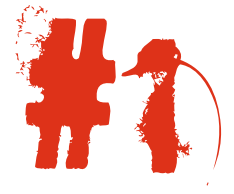
(opposite is also true: teams structure tends to lean towards existing system architecture in an attempt to “optimize skillset” and to reach imaginary “100% resource utilization”)

dependencies: internal, external, business domains, product lines, PBIs, someone's absence (or presence), relationships, processes, workflows, privileges, access rights, specialities, competencies, knowledge, source code quality and ownership, code repositories, branches, versions merging, real or perceived module boundaries, frameworks, layers, components, systems, DBs, tools, ...

**Dependencies  
are f\*cking evil.**

scrum**vival**.com/20130620

# so, how to scale Scrum?



# don't.

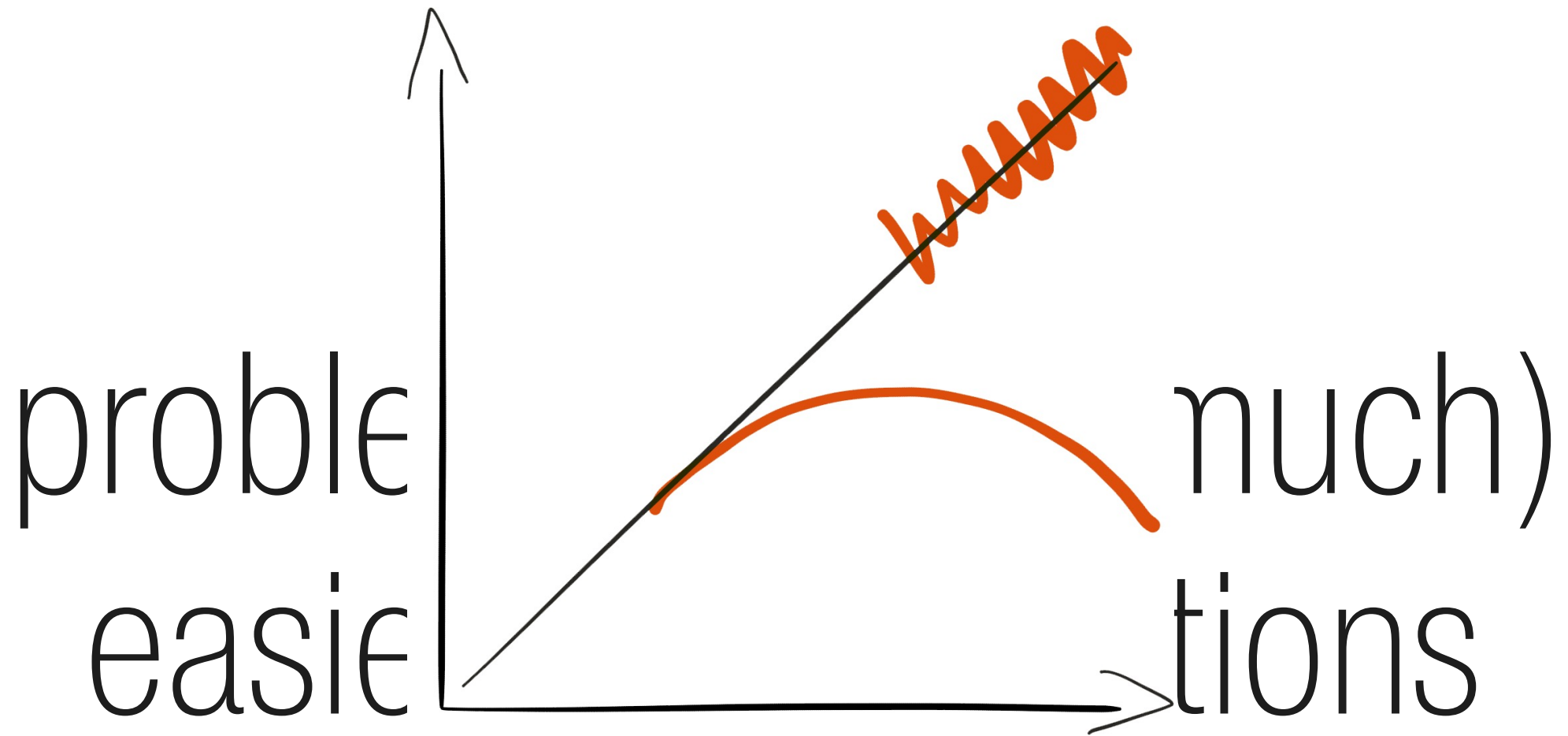
“

Scaling agile methods is the last thing you should do. A better approach is to try to scale down your project.

**–Martin Fowler**

<http://martinfowler.com/bliki/LargeAgileProjects.html>

”



(don't scale up if you struggle with Scrum at a team level; you will end up with even bigger mess)

# think of alternatives

“

Before every action ask yourself. Will this bring more monkeys on my back? Will the result of my action be a blessing or a heavy burden?

**–Alfred Armand Montapert**

”

use Scrum to identify and remove  
impediments at a team and org level

build up teams' capabilities (teamwork, skills,  
motivation, relationships, practices and tools)

focus on value, produce less software, scale  
the scope down

kill multitasking, streamline projects/releases

...

# 1 Product = 1 Backlog

(and possibly 1 Product Owner to rule them all)



# software is invisible

(thank goodness outcomes of running software are visible)

**Dependencies  
are f\*cking evil.**

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# enable integration

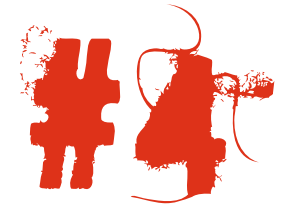
(think beyond technical e.g. communication, relationships,  
cultural, environmental)

integrate work across all levels **early and often**

build and inspect integrated increments **early and often**

identify and remove dependencies **early and often**

strive for technical excellence (practices, architecture, quality)



don't share PBIs  
across teams

(refine, reframe, regroup)

# refinement bingo

(don't split PBIs as it often creates dependencies  
and/or leads to “waterfallish” approach; **simplify** PBIs  
instead)

Game rules:

- The whole team plays.
- Pick up a backlog item
- Pick up 3 random numbers from 1 to 12
- Look up the breakers (next slide)
- Player who sees a break up possibility first yells: “Bingo!”
- Player gets 5 points for each new *valuable-usable-feasible* backlog item
- Player gets a penalty of -1 point for each proposal rejected by the team
- Estimate and put the new backlog items to the backlog
- Move on the next backlog item

1. **SEPARATE**
2. **SIMPLIFY**
3. **FAKE**
4. **SUBSTITUTE**
5. **REMOVE**
6. **MINIMIZE**
7. **REDUCE**
8. **LIMIT**
9. **DEFER**
10. **DISTINGUISH**
11. **COMBINE**
12. **UNIFY**

1. **DATA**
2. **ERROR**
3. **OUTPUT**
4. **INPUT**
5. **USER**
6. **LOGIC**
7. **WORKFLOW**
8. **PERFORMANCE**
9. **INTERFACE**
10. **DEPENDENCY**
11. **LAYER**
12. **TRANSACTION**

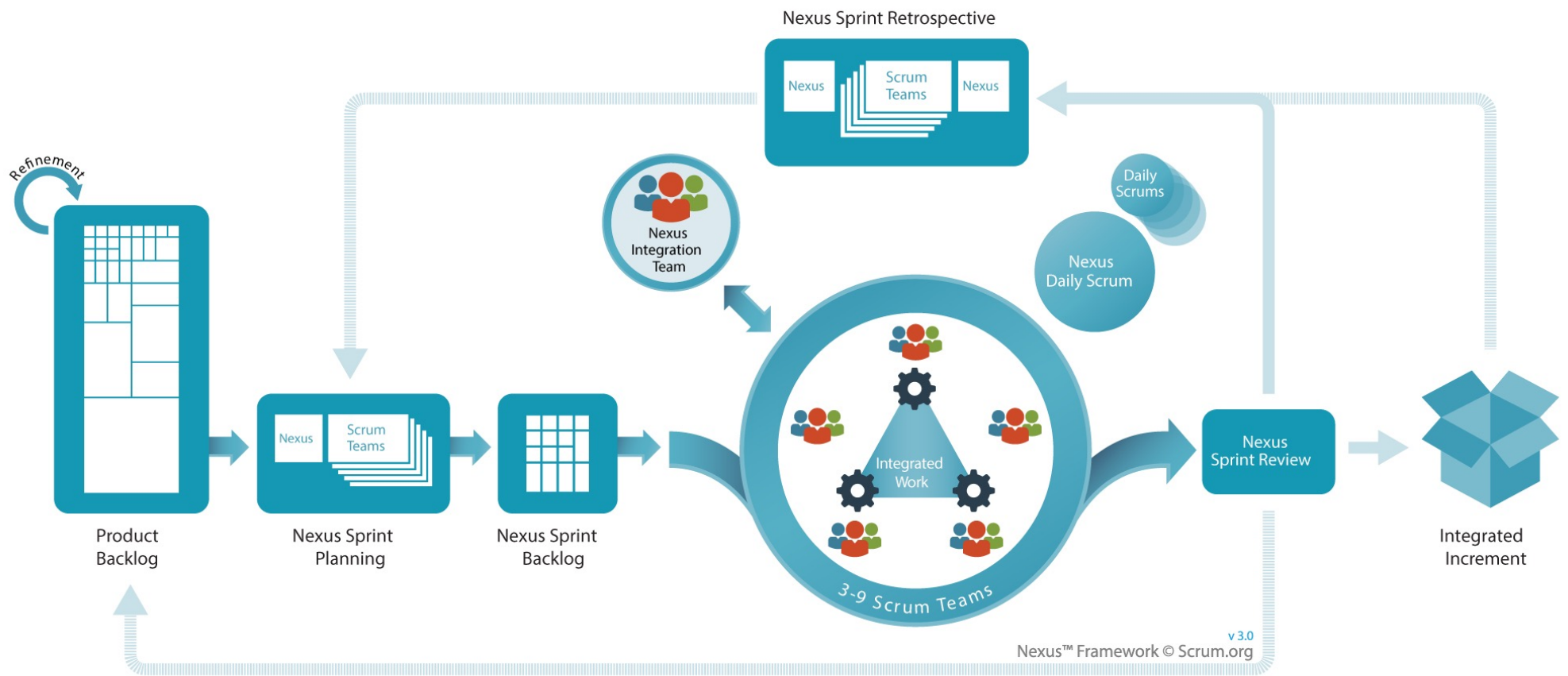
1. **LIMIT(S)**
2. **ROLE(S)**
3. **FORM(S)**
4. **SIZE(S)**
5. **TYPE(S)**
6. **STEP(S)**
7. **NUMBER(S)**
8. **OPERATION(S)**
9. **VARIATION(S)**
10. **VALIDATION(S)**
11. **DETAIL(S)**
12. **FUNCTION(S)**

#5

let there be slack

**6±3 Scrum Teams**

# Nexus



# überscrum

(additive framework for scaling; Scrum foundations – principles and values; opens communication; widens and deepens inspection and adaptation mechanisms; fosters continued transparency; relies on bottom-up intelligence)

# SPRINT PLANNING

I { 0.5h OVERVIEW (BUSINESS ORIENTED)  
WHAT, FOR WHOM, WHY  
SPRINT GOAL (PO)

0.5h WORK ASSIGNMENT  
(1.0h)? (TEAMS) (PRELIMINARY COMMITMENT)

II { 2.0h SPRINT BACKLOGS  
(TEAMS)

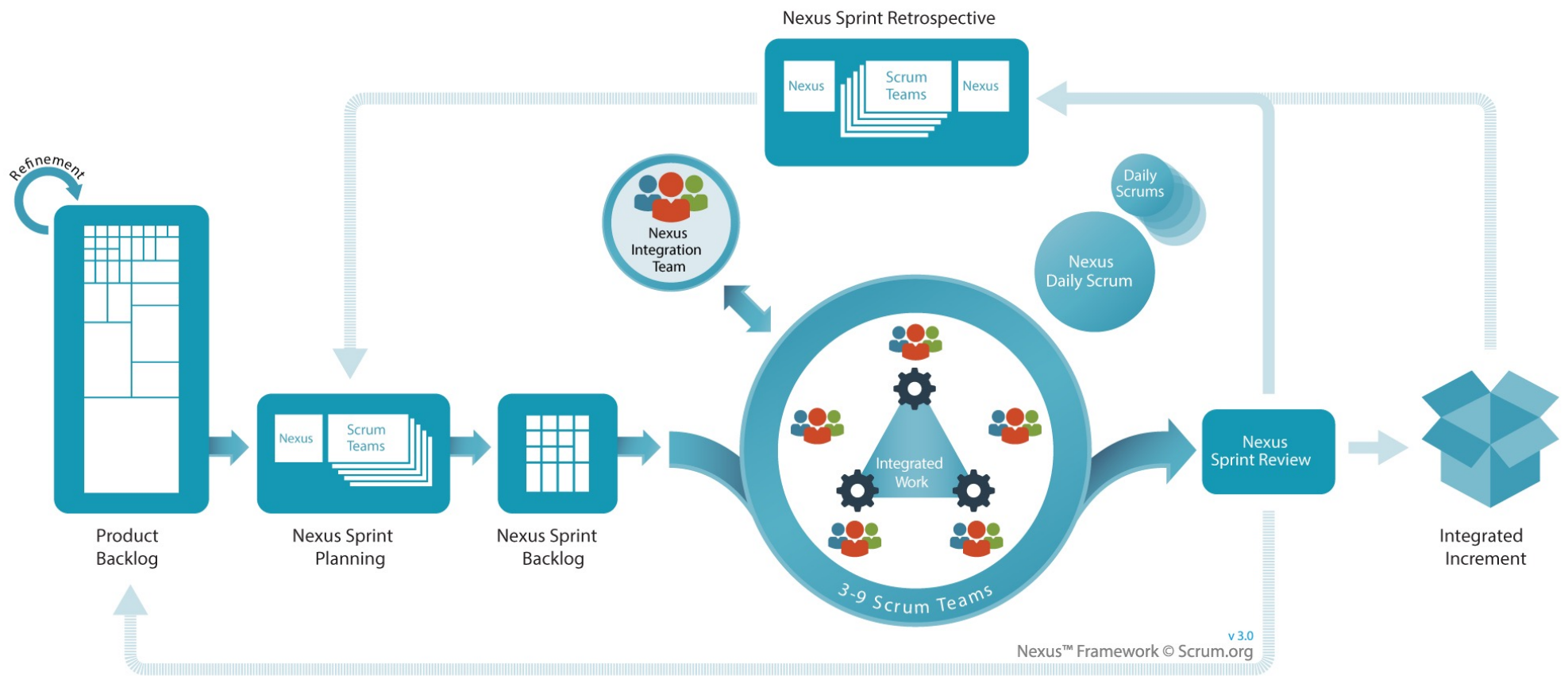
15 mins FINAL COMMITMENT  
SPRINT GOAL ANNOUNCEMENT  
HEY! GO!

# GROOMING (1-2x) 10-30 ITEMS per sprint

E 5min INTRO <sup>PREPARE ITEMS LIST BEFORE SESSION</sup>  
R 15min WRITING CARDS (REWRITE IF NEEDED)  
R 40min ESTIMATION (AFFINITY MAPPING)  
<sup>HAVE LAPTOPS HANDY</sup>  
<sup>PUT AS MANY DETAILS "?" ON A SIDE FOR FURTHER CLARIFICATION</sup>  
<sup>ON A CARD AS YOU THINK WILL BE SUFFICIENT</sup>

E 60min CLARIFICATION WITH  
DECOMPOSE, REWRITE, ADD DETAILS  
NARROW SCOPE

PL 30min COMPLETE ESTIMATION



**6±3 Nexuses**

**Nexus+**

# thank you! questions?

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**<http://www.poddzewem.pl>**

**<https://www.scrum.org/Resources/What-is-Scaled-Scrum>**

**<http://techbeacon.com/enter-nexus-ken-schwaber-scaling-scrum-future-agile>**

**<http://www.scrumvival.com>**

**<http://www.halfarsedagilemanifesto.org/>**

