

Scaling Agile @ LEGO & Spotify

EA-träff
Okt 2017

Climate guy



Consultant



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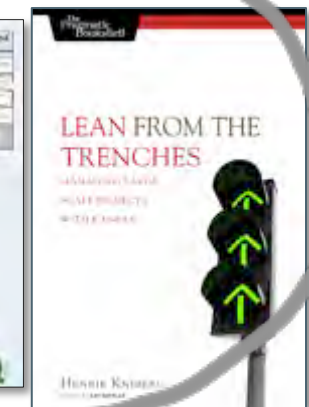
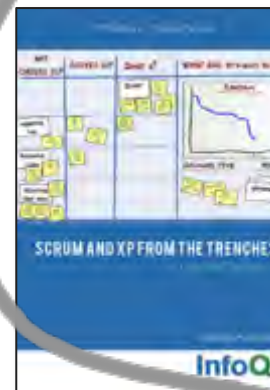
Dad



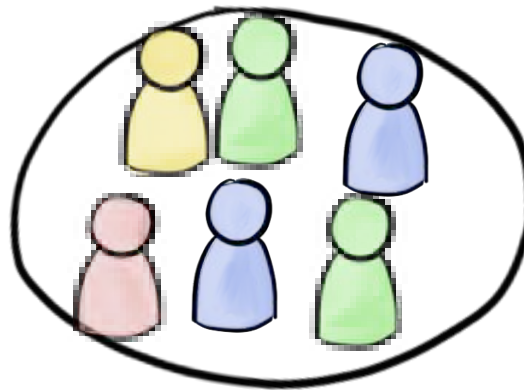
Organizational coach & Change Instigator



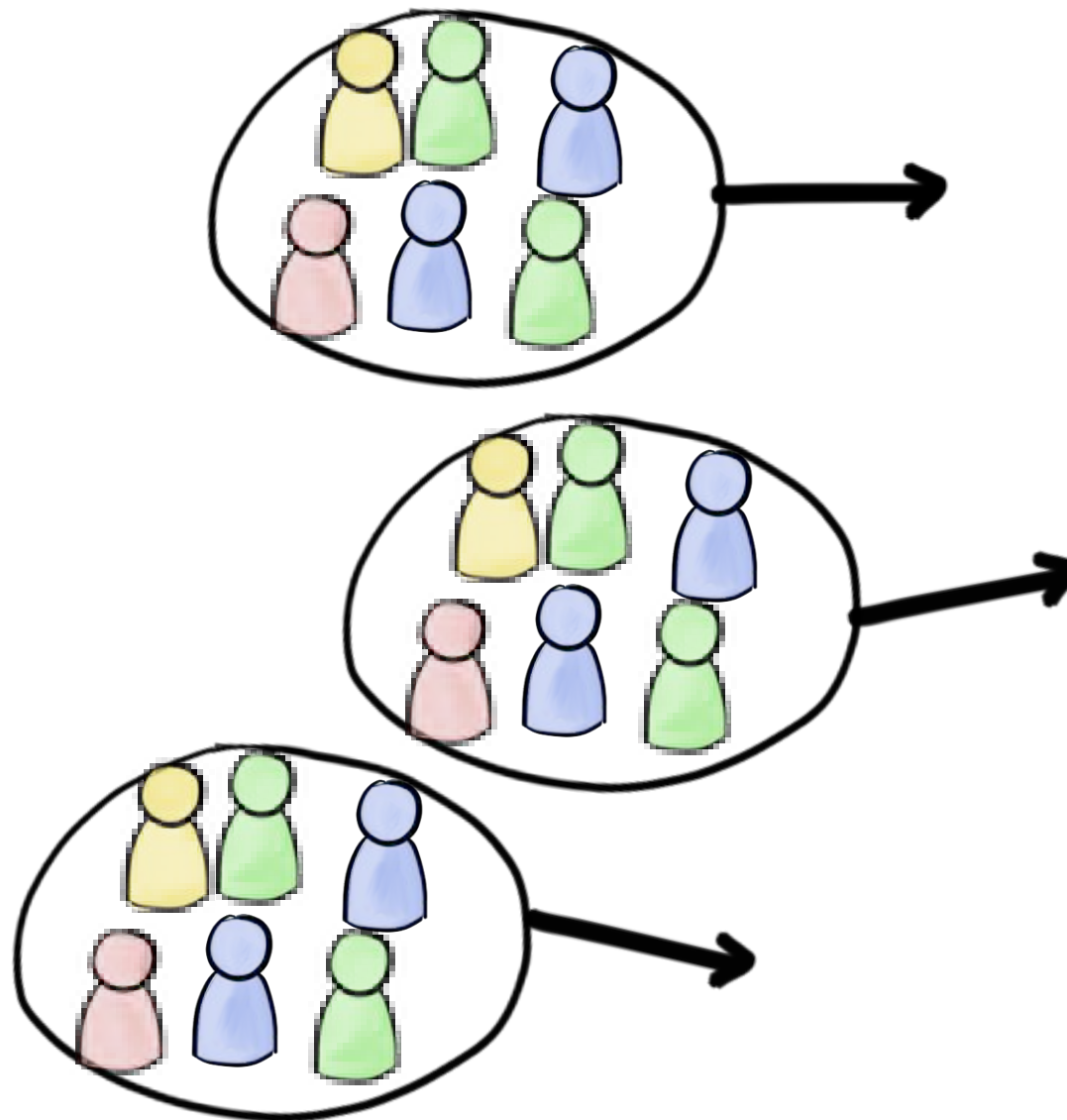
Author



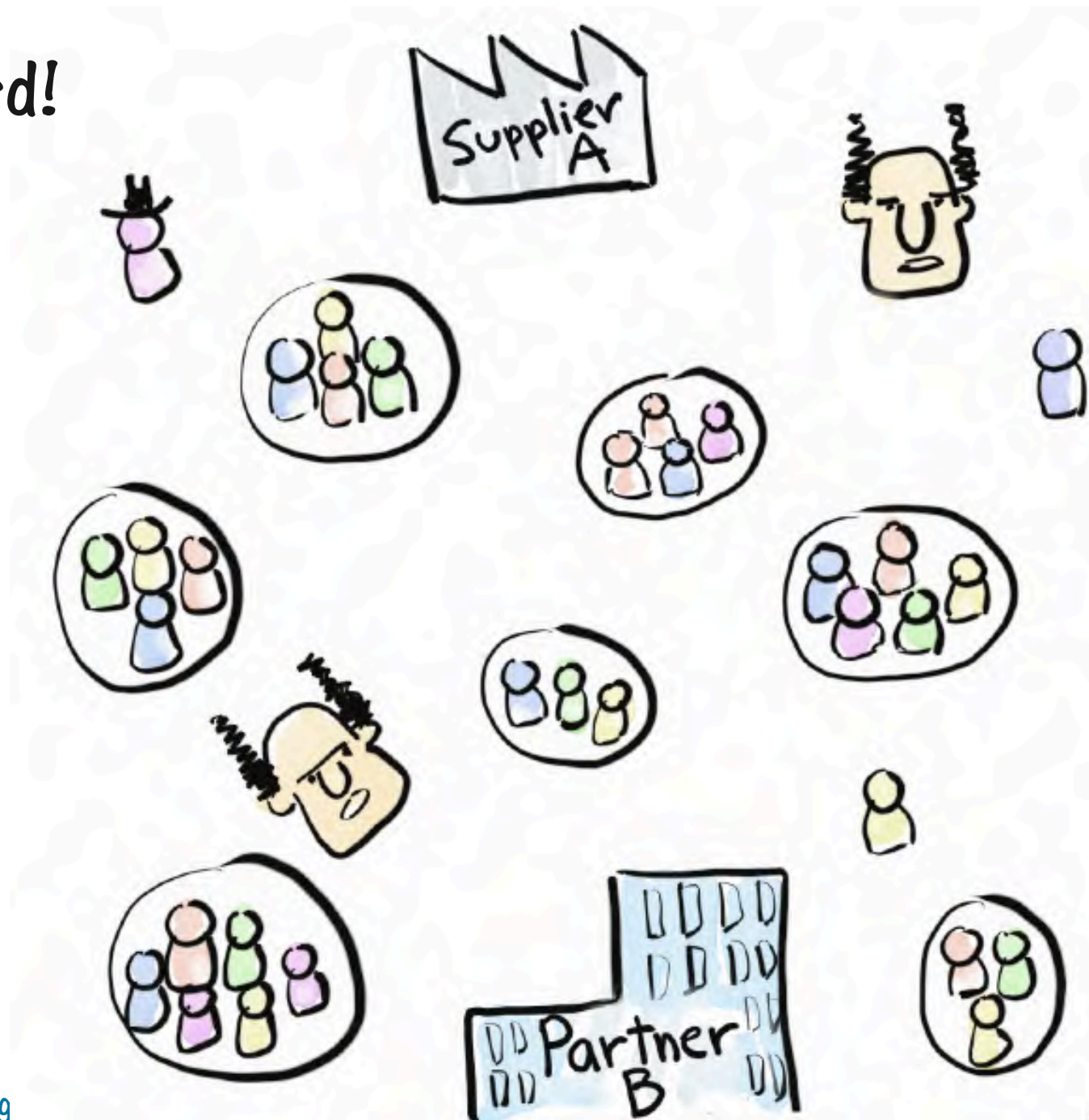
Not too hard



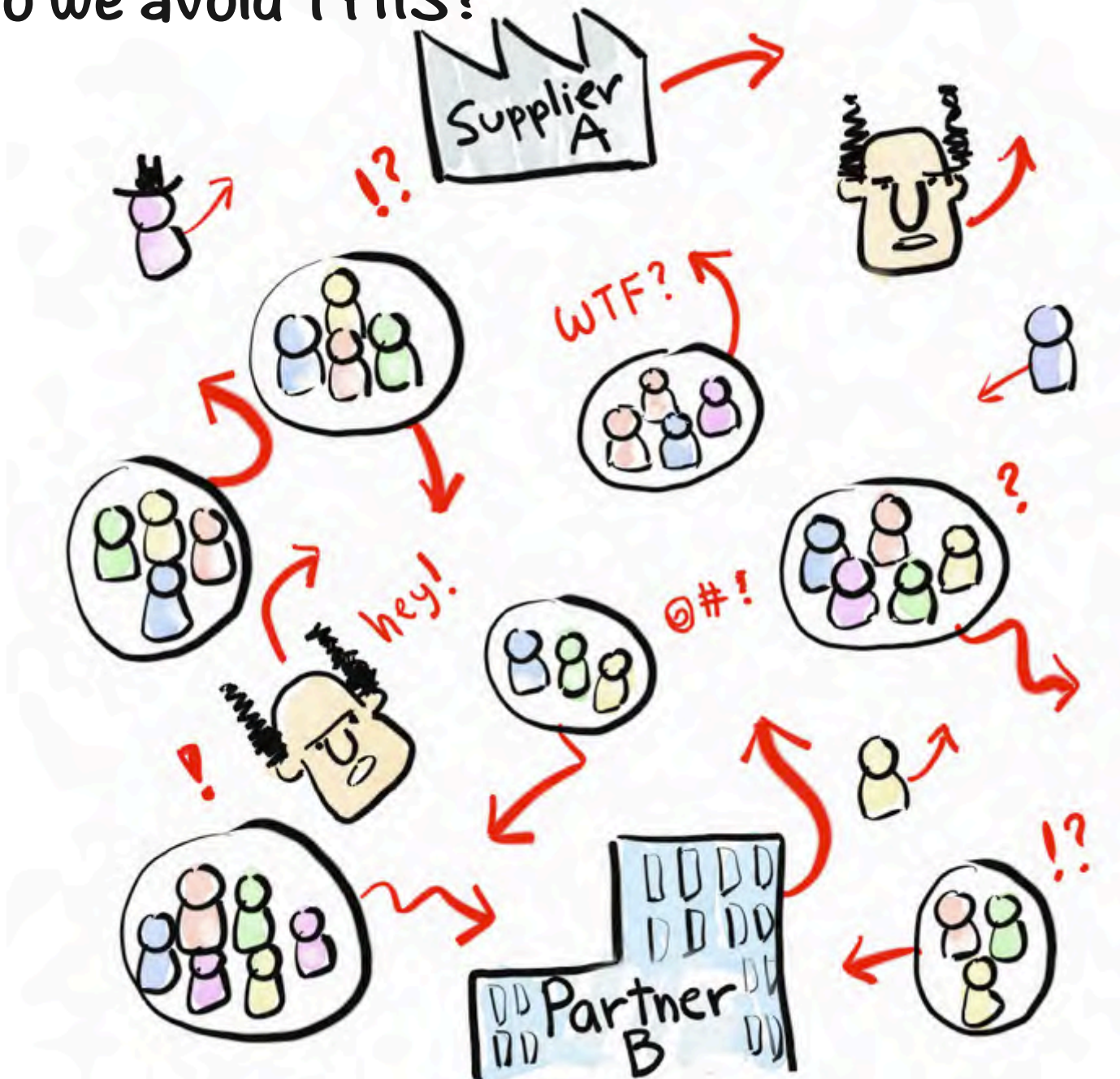
A bit trickier



Hard!



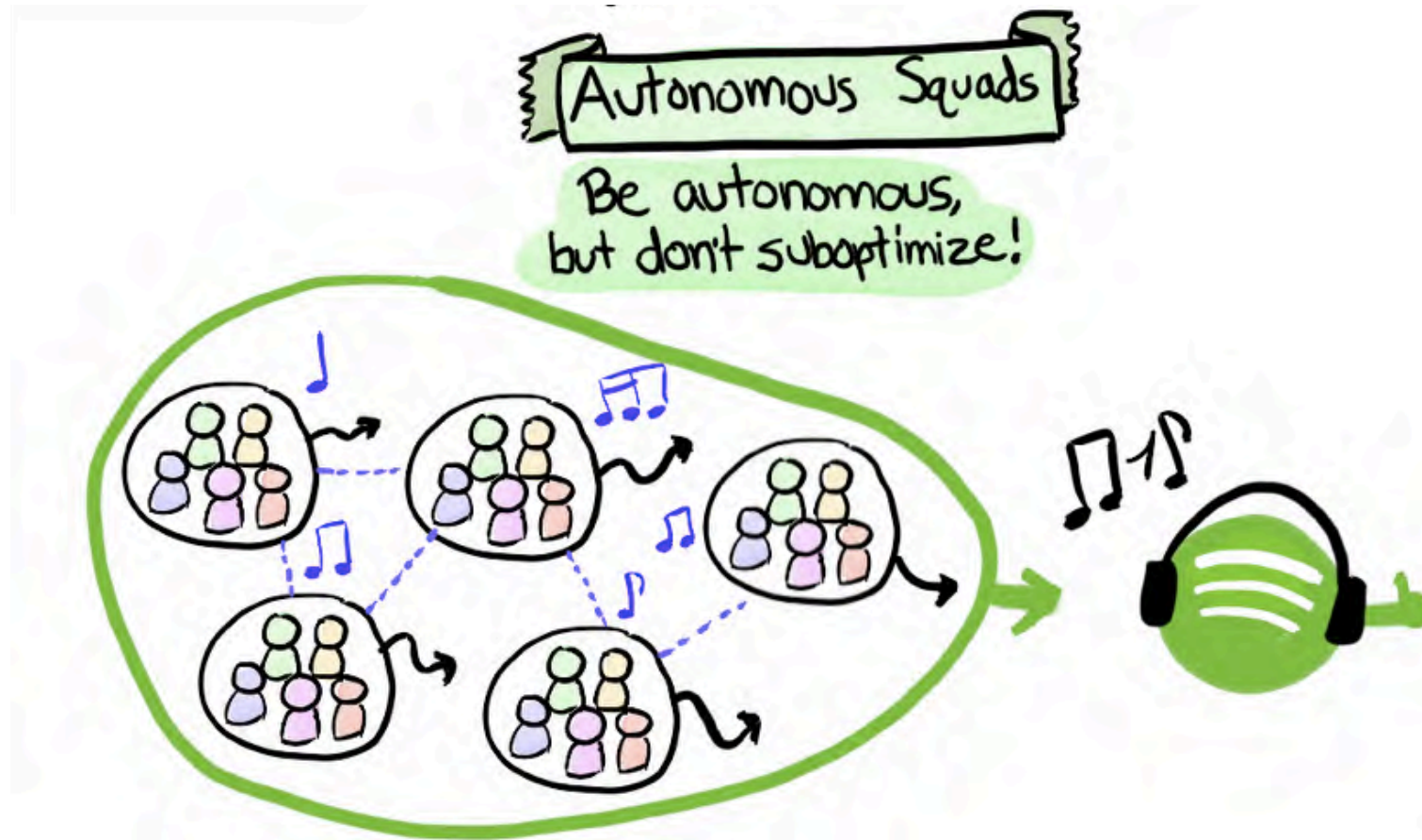
How do we avoid THIS?





My scaling story

6 years ago...



Rise of the “Spotify Model”

Autonomous
Be autonomous
but don't



Spotify Engineering Culture - part 1

from Spotify Training & Development



13:12



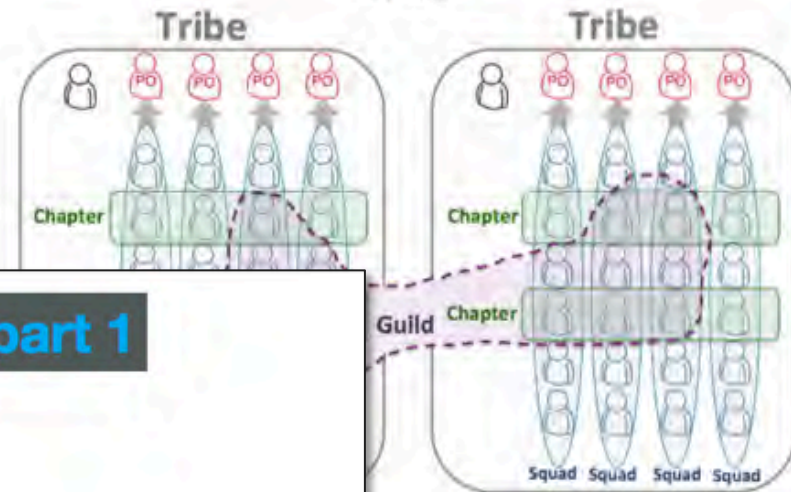
HD



vimeo

Scaling Agile @ Spotify with Tribes, Squads, Chapters & Guilds

Henrik Kniberg & Anders Ivarsson
Oct 2012



ment organization is always a challenge!

h so far is Spotify, which has kept an agile mindset despite

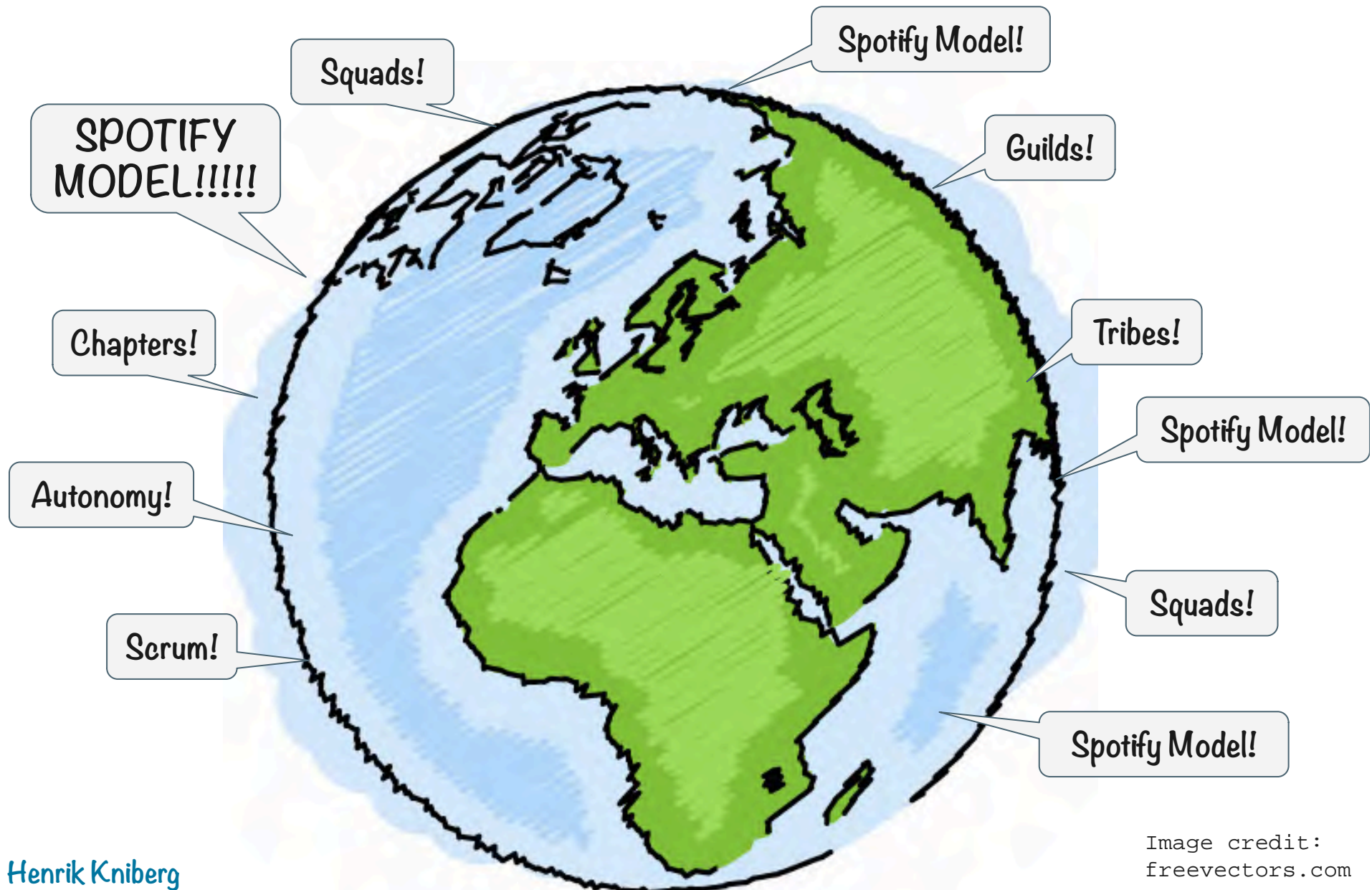
ing the music industry. The company has only existed 6
s and over 4 million paying. The product itself can be
an instantly find and play every song in the world".

gile software development) visited Spotify and said "Nice -
matrix format since 1992 :) so it is really welcome to see."

h caught in engaging discussions around how we work at
hundreds of developers. Many people are fascinated by

s (like any good agile company) evolving fast. This article
a journey in progress, not a journey completed. By the

Then this happened:



3 years ago...



"Captain Agile"



"Dr Agile"



Planning as a social event

Scaling Agile @ LEGO

Henrik Kniberg & Eik Thyrsted Brandsgård
December 2016

- What? A 150-person meeting for ~~2 days~~ 1 day?
- Yeah! Every second month. Works great.
- But why? And how?



Background

LEGO Digital Solutions (DS) is a group of 20 or so teams responsible for handling communication with kids and parents via whatever device they are using - computers, tablets, apps, wearables, VR, etc. We also look into future product development, how to embrace new technology, how to take the classical way of playing with toys and combining with something cool, like augmented reality, or ways of "scanning" a physical model and getting it into a game. Most teams are in Billund, Denmark, but we also have a bunch of teams in India.



"Captain



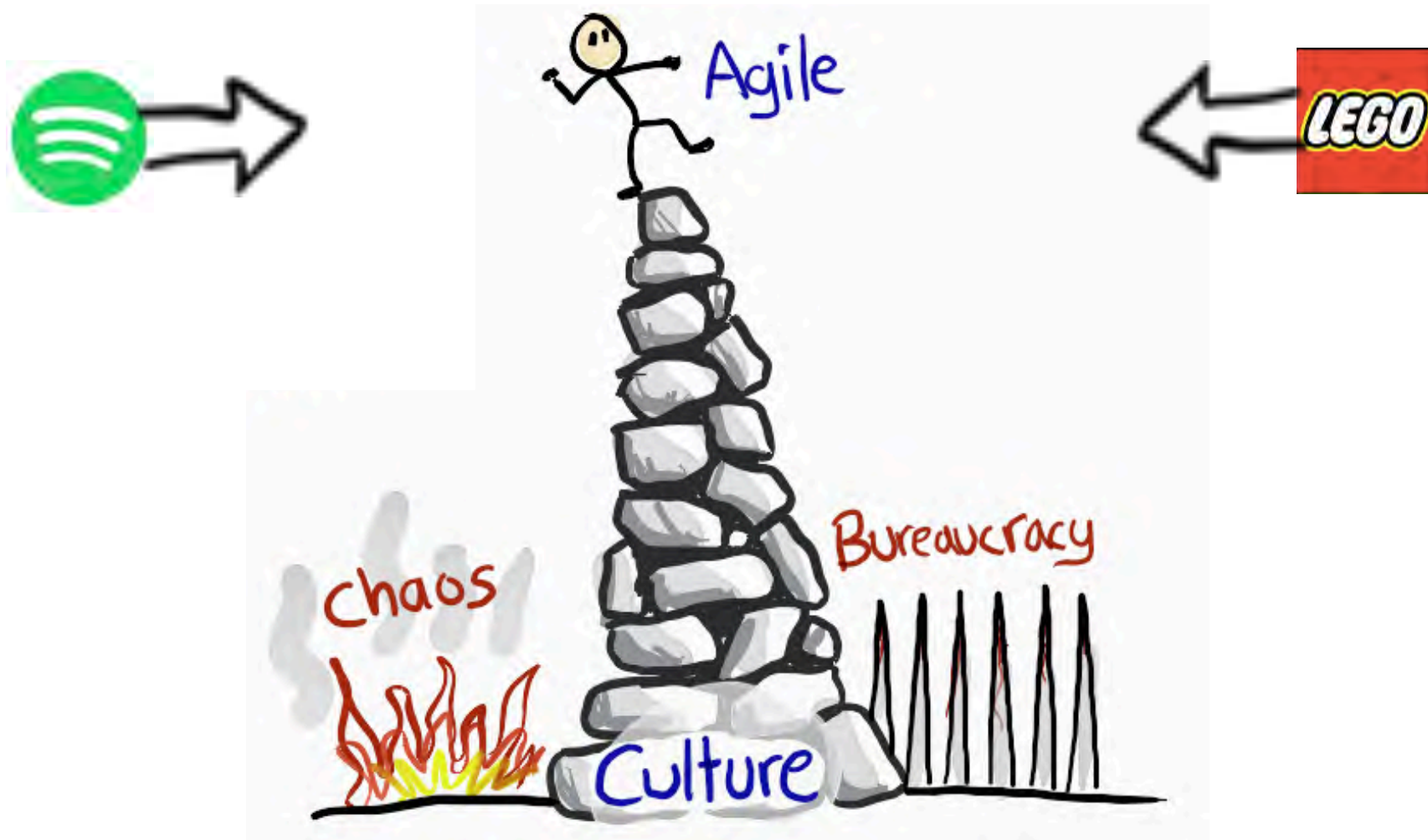
"Dr Agile"



What can we learn?



Finding the Minimum Viable Bureaucracy





Optimizing for Value

Optimize for Value

not Effort or Output

Effort (hours spent)

Output (items delivered)



Value



What you measure is what you get

Focusing on
Effort



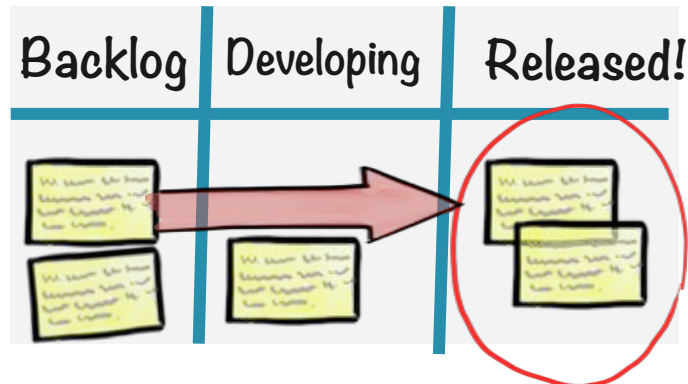
Hours

Time reports

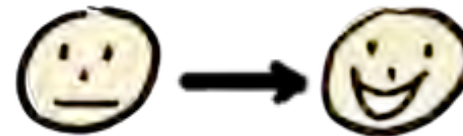
Resource utilization



Focusing on
Output



Focusing on
Value & Learning





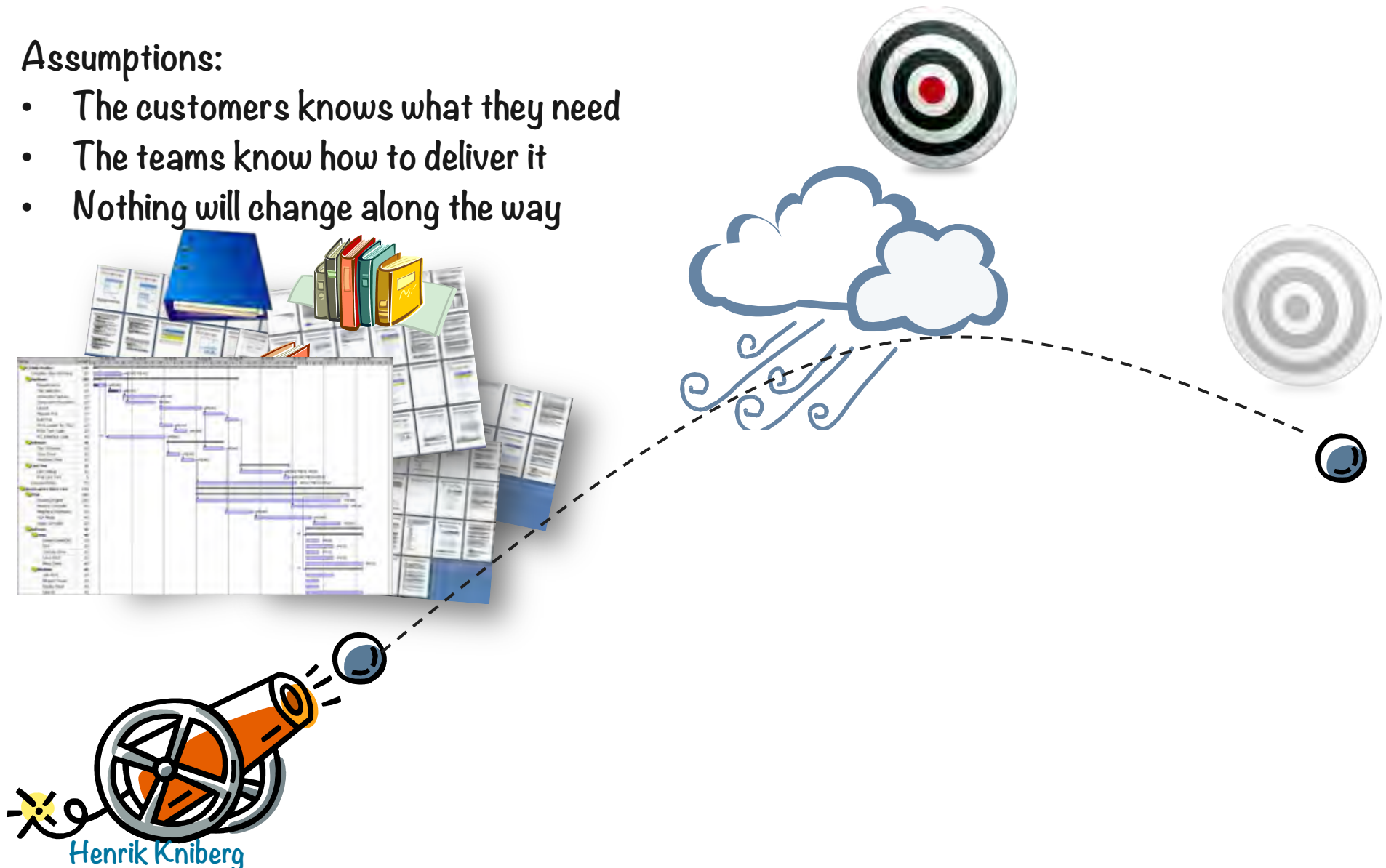


Feedback loops

Predictive process = cannon ball

Assumptions:

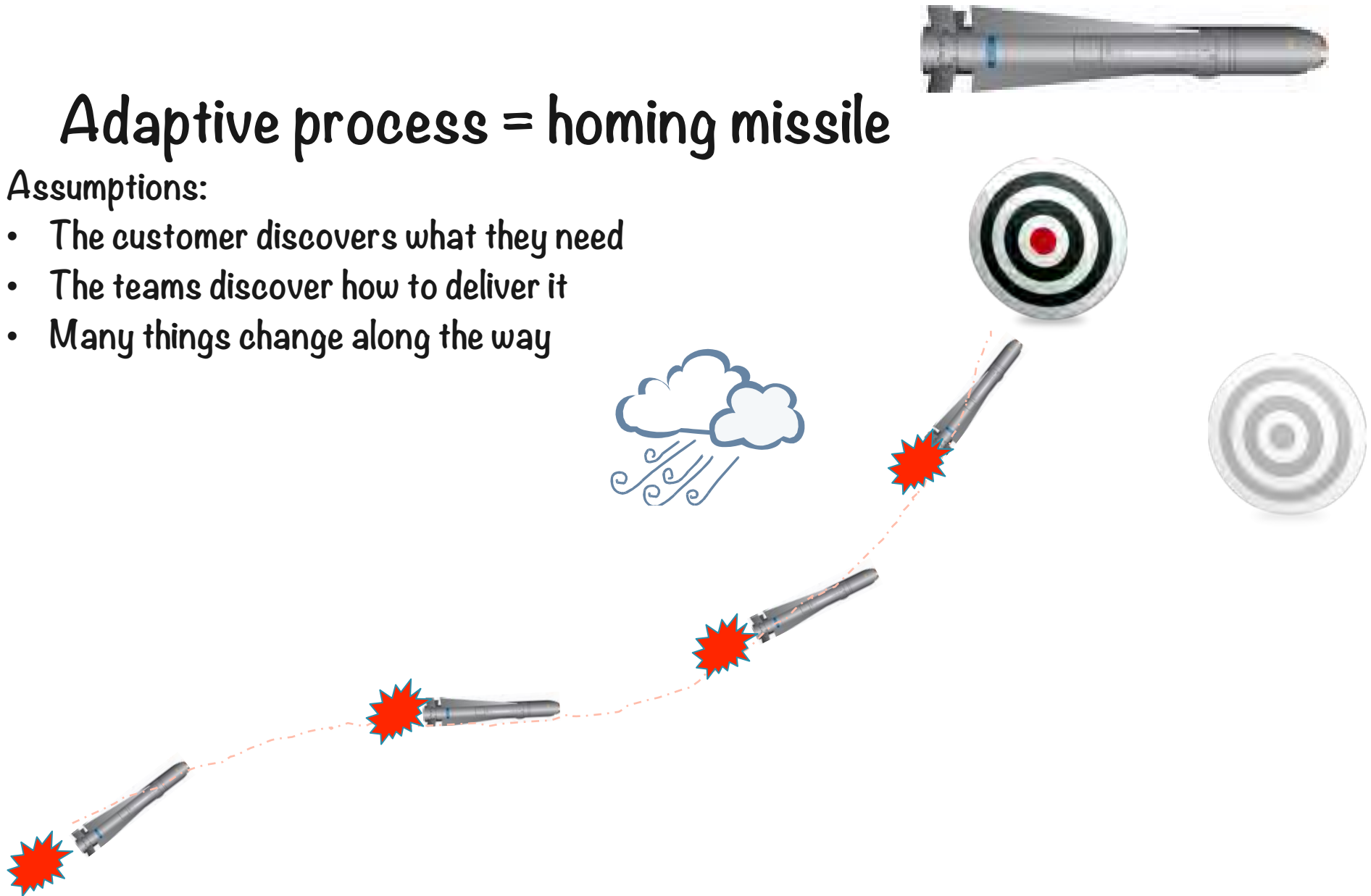
- The customers knows what they need
- The teams know how to deliver it
- Nothing will change along the way

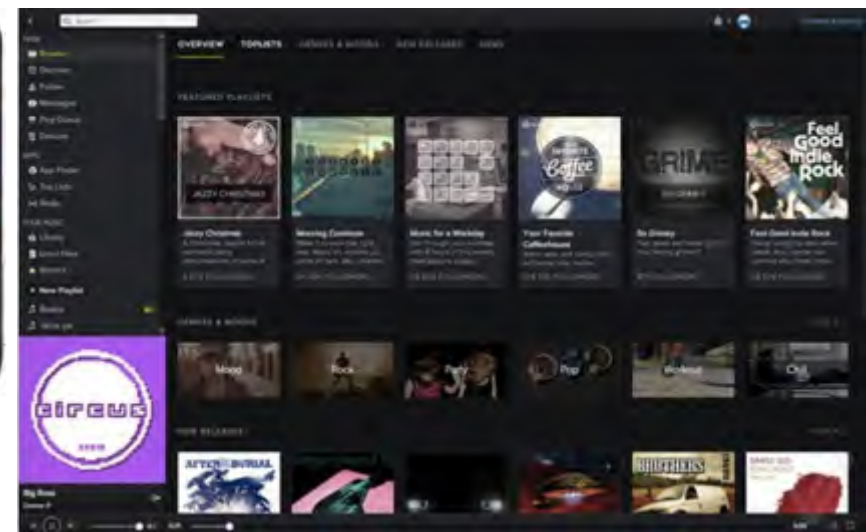
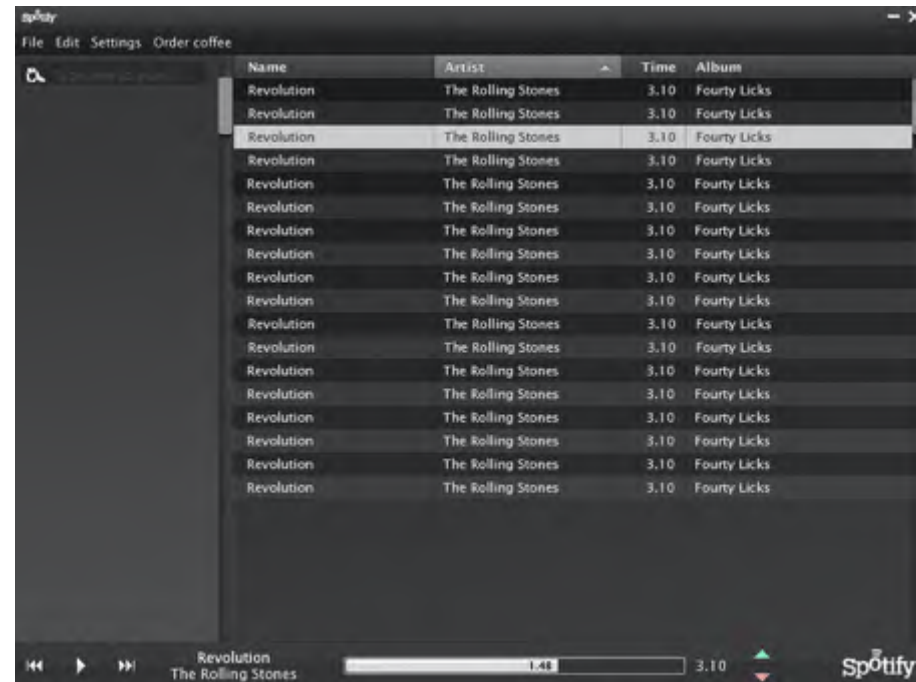


Adaptive process = homing missile

Assumptions:

- The customer discovers what they need
- The teams discover how to deliver it
- Many things change along the way





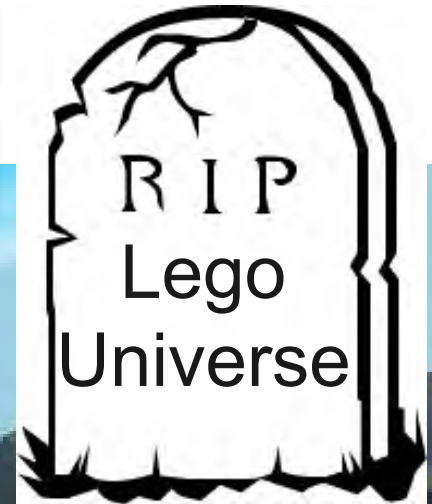
Henrik Kniberg



> 250 people involved

> 4 years to first public release

Shut down after 2 years of operation



Henrik Kniberg

Lego Universe Spider Cave



Brian Tyler



Henrik Kniberg



MINECRAFT

0.0.11a

750 fps, 0 chunk updates

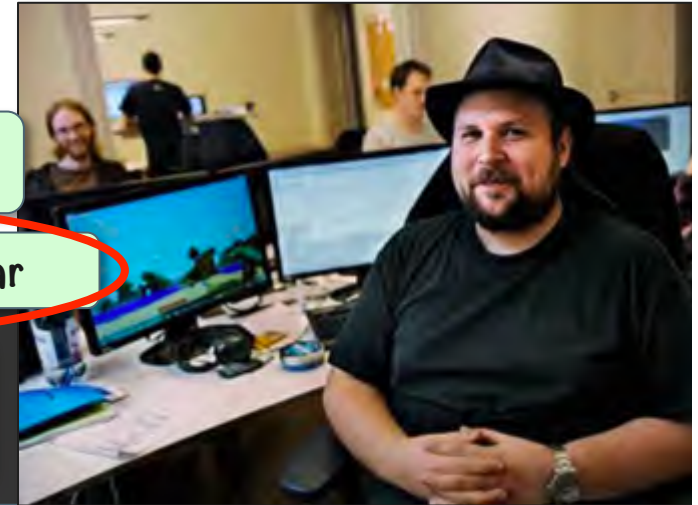
Built by 1-2 people

6 days to first public release

> 100 releases within first year

\$80 million revenue within first 15 months

Sold to MS for \$2.5 Billion!

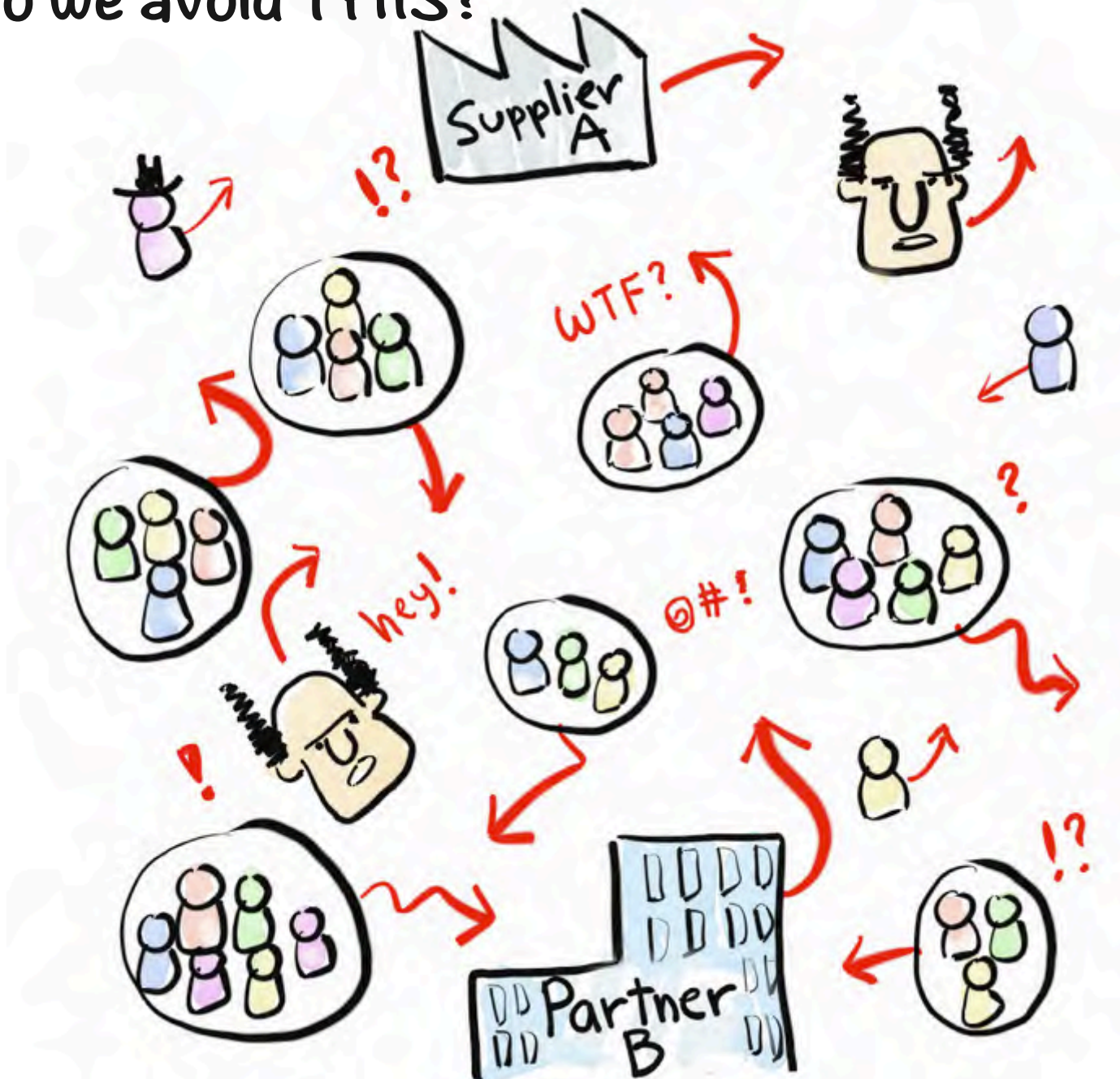


What is “Quality?”

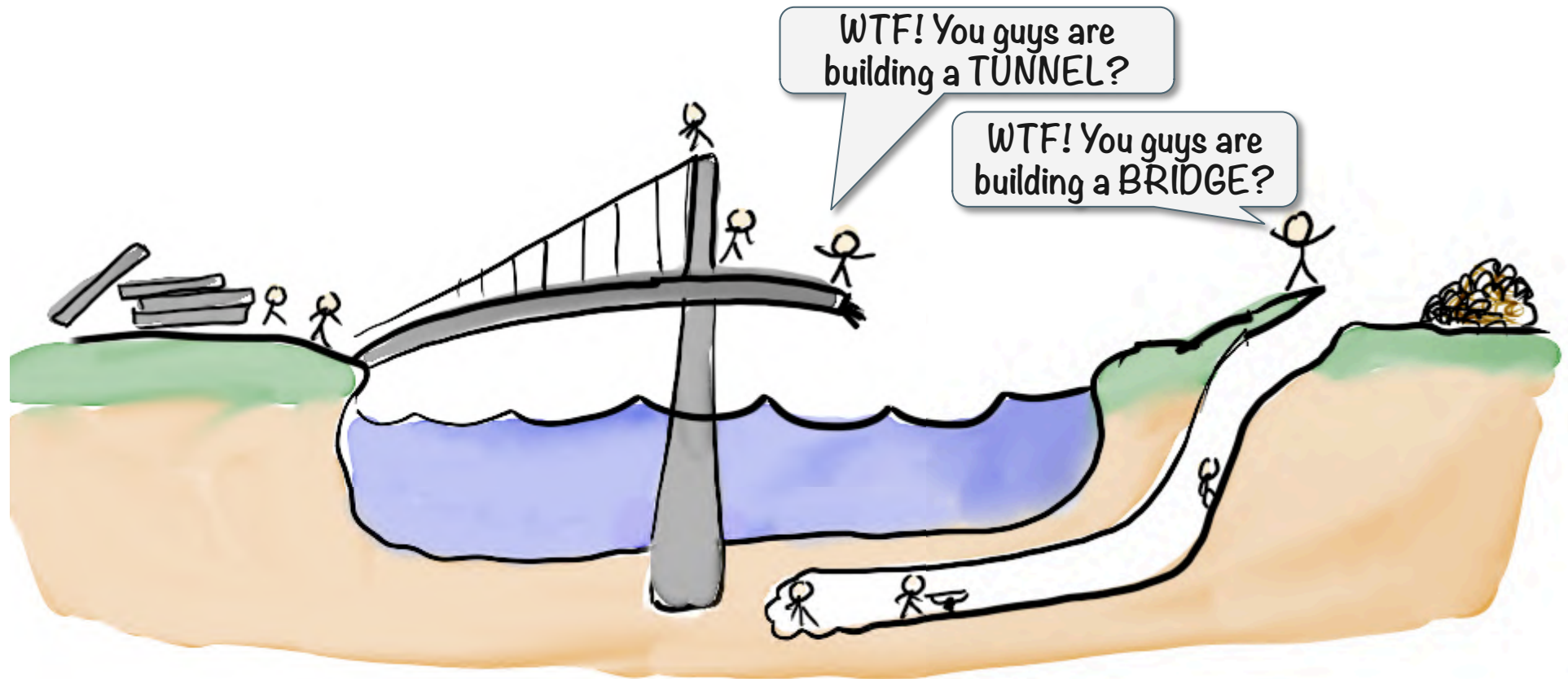


Alignment

How do we avoid THIS?



Suboptimization



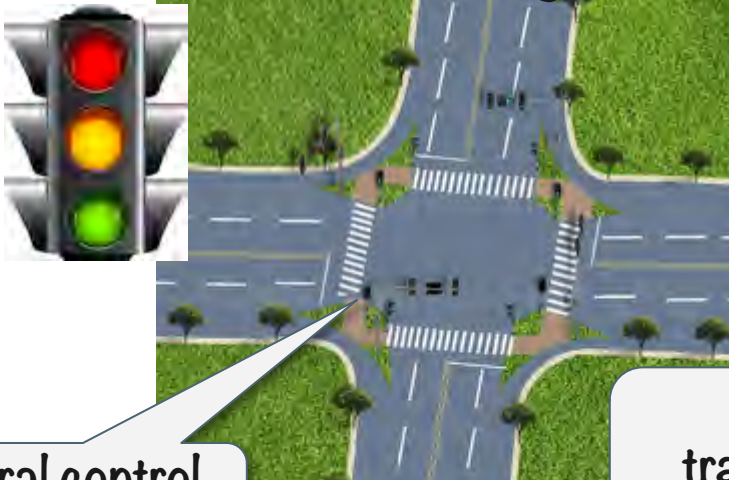
Henrik Ronsbo

Common reaction



Someone needs to
take charge!

Traffic signals



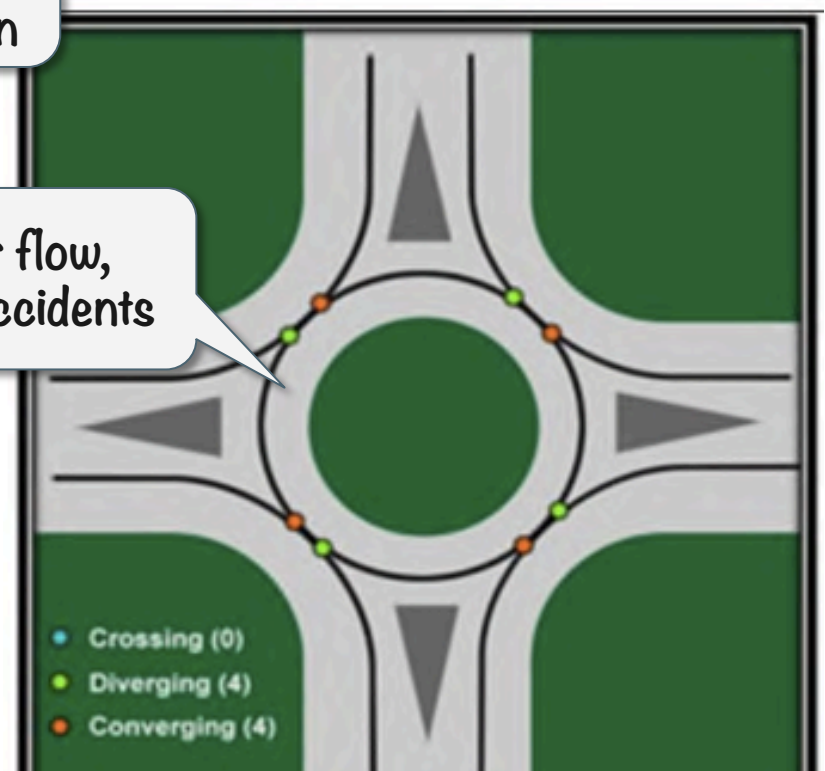
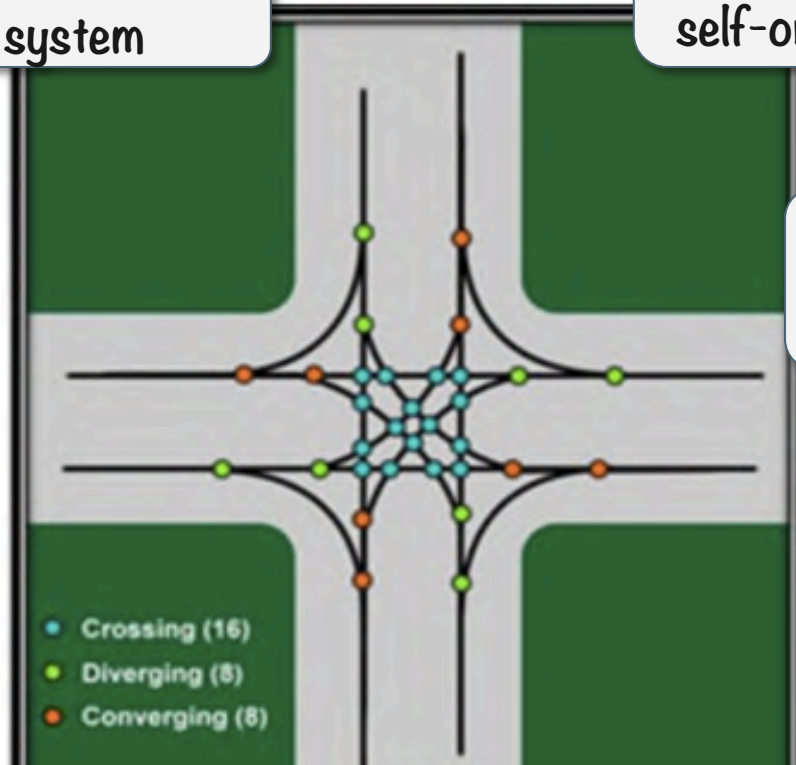
Central control system

Trust,
transparency,
self-organization

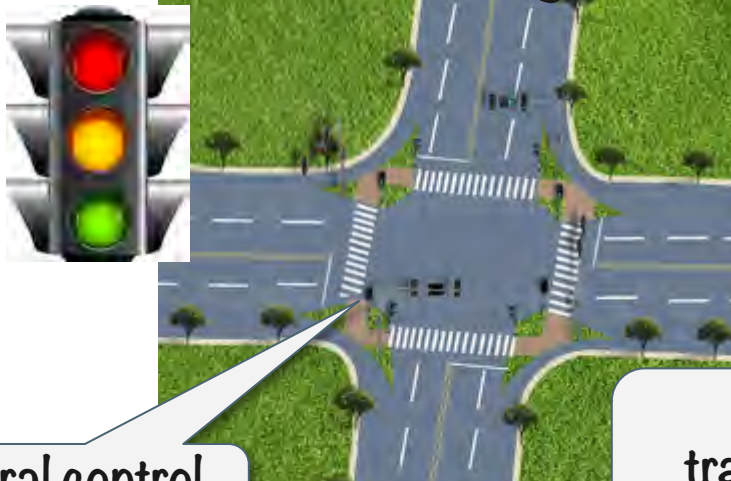
Roundabout



Faster flow,
Fewer accidents



Traffic signals



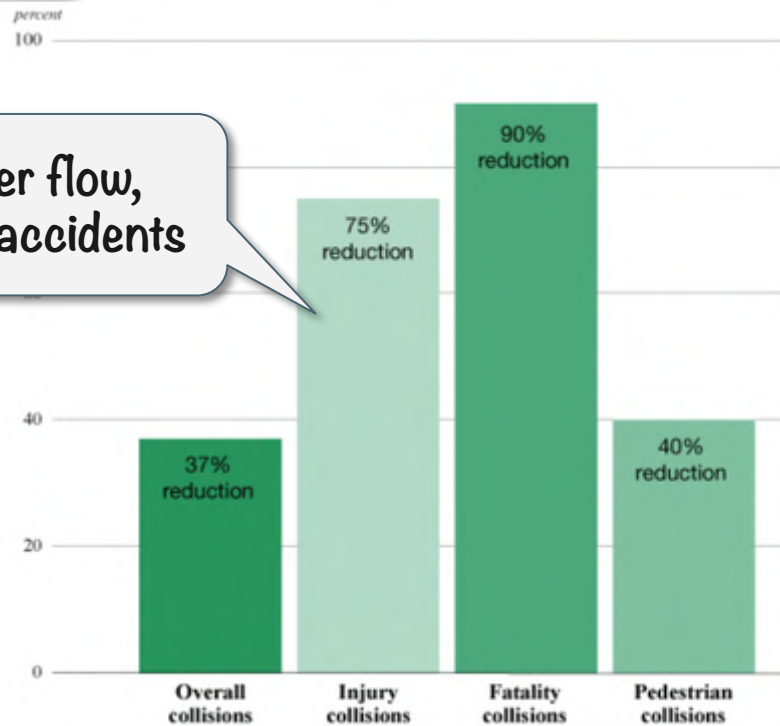
Central control system

Trust,
transparency,
self-organization

Roundabout



Faster flow,
Fewer accidents



100% control = 0% motion

If everything's under control,
you're going too slow!

- Mario Andretti



Leader's job:
Explain what problem needs to be solved.
And Why.



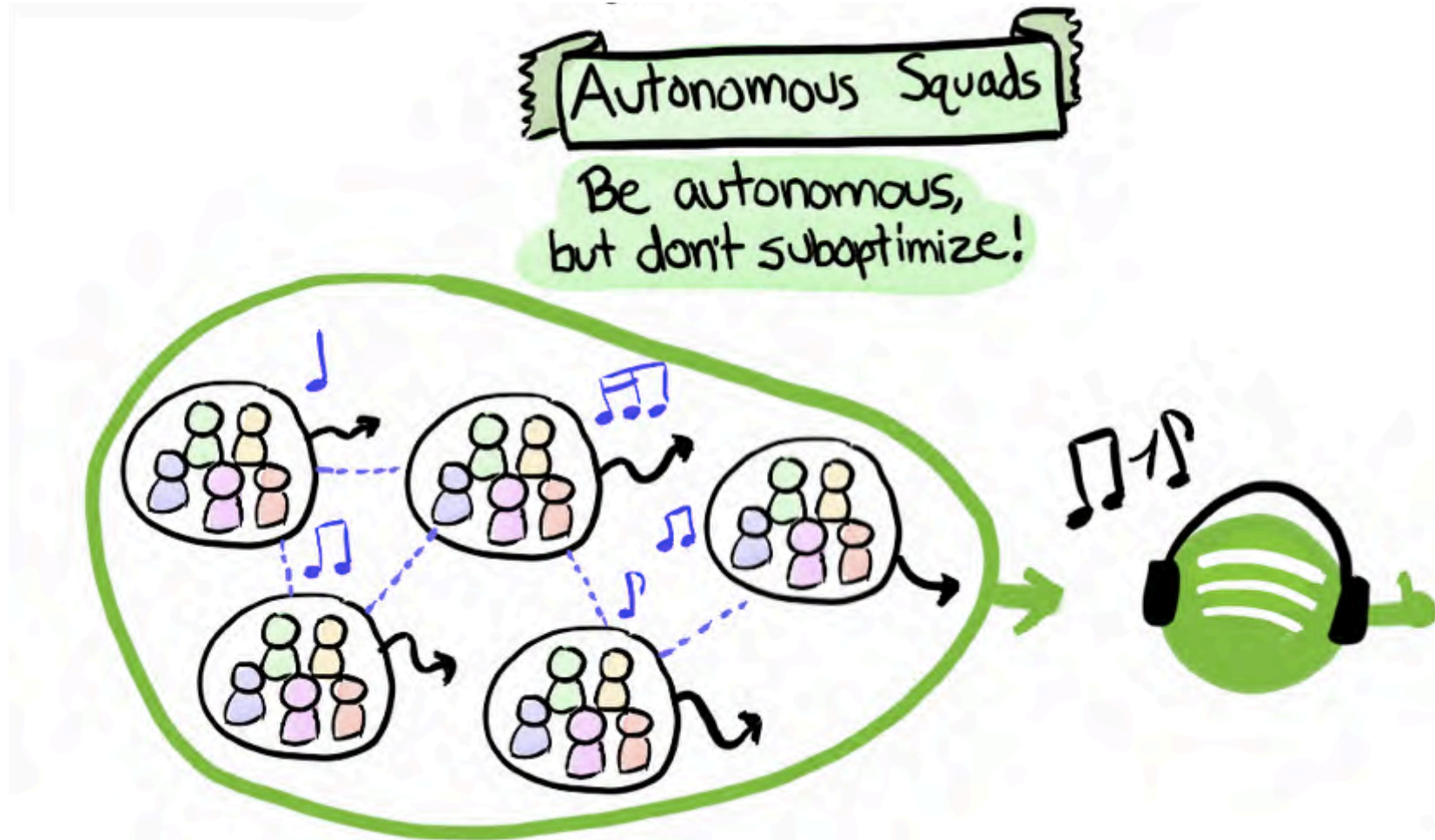
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Teams!

Small, self-organizing, cross-functional

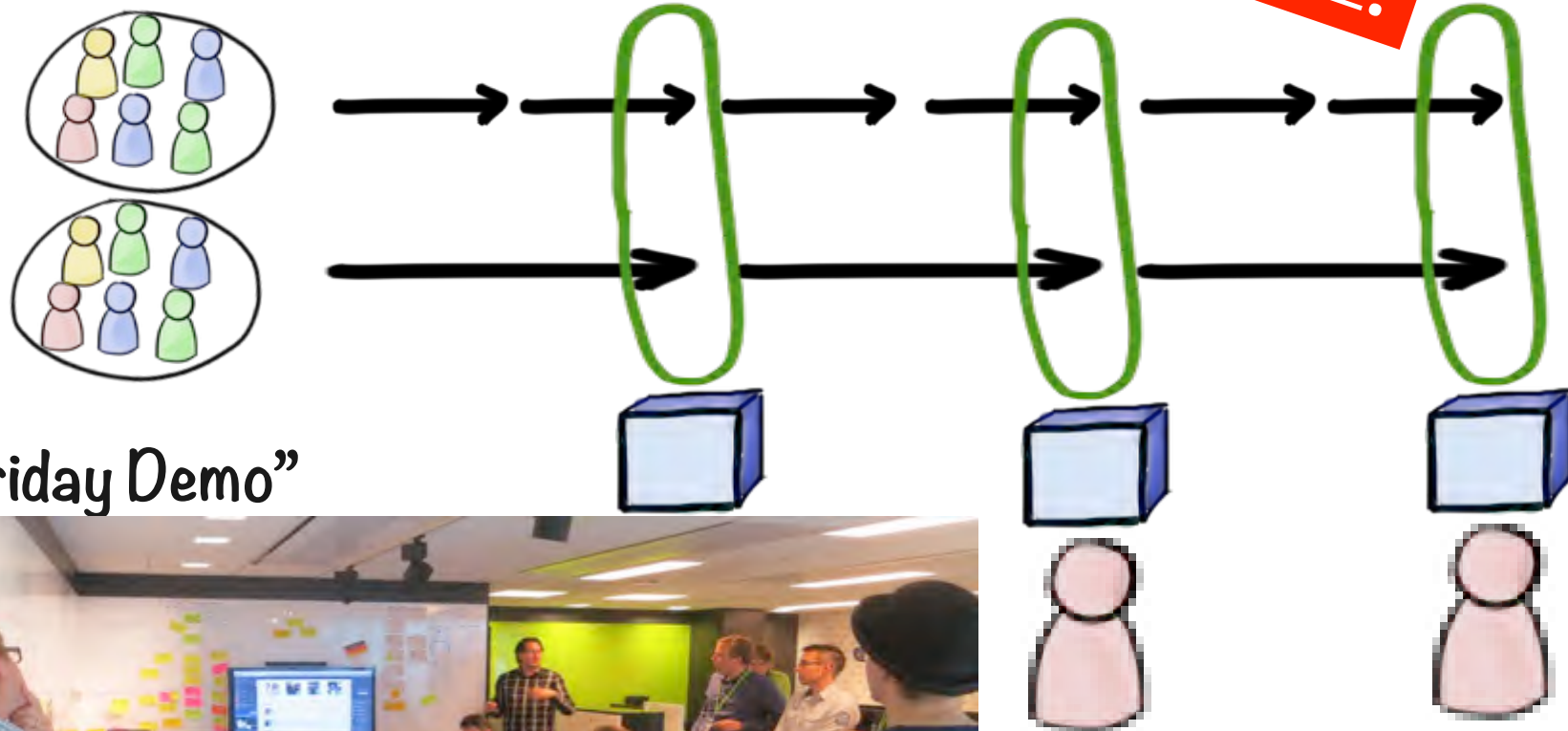


Teams of teams



Pattern: Integration Cadence

DEMO OR DIE!



“Friday Demo”



Henrik Kniberg

Assume the best
in people
and they will strive to
live up to it

$$\begin{aligned} \text{Productivity} = \\ &\text{Effort} \\ &\times \text{Competence} \\ &\times \text{Environment} \\ &\times \text{Motivation}^2 \end{aligned}$$



Don't "motivate"
teams. Remove the
demotivators.

The importance of slack



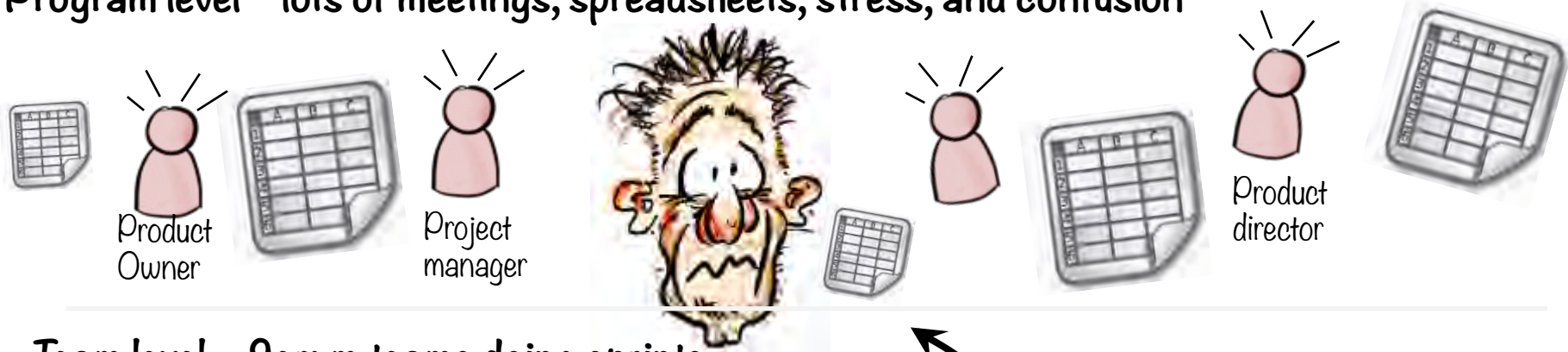
Dependencies



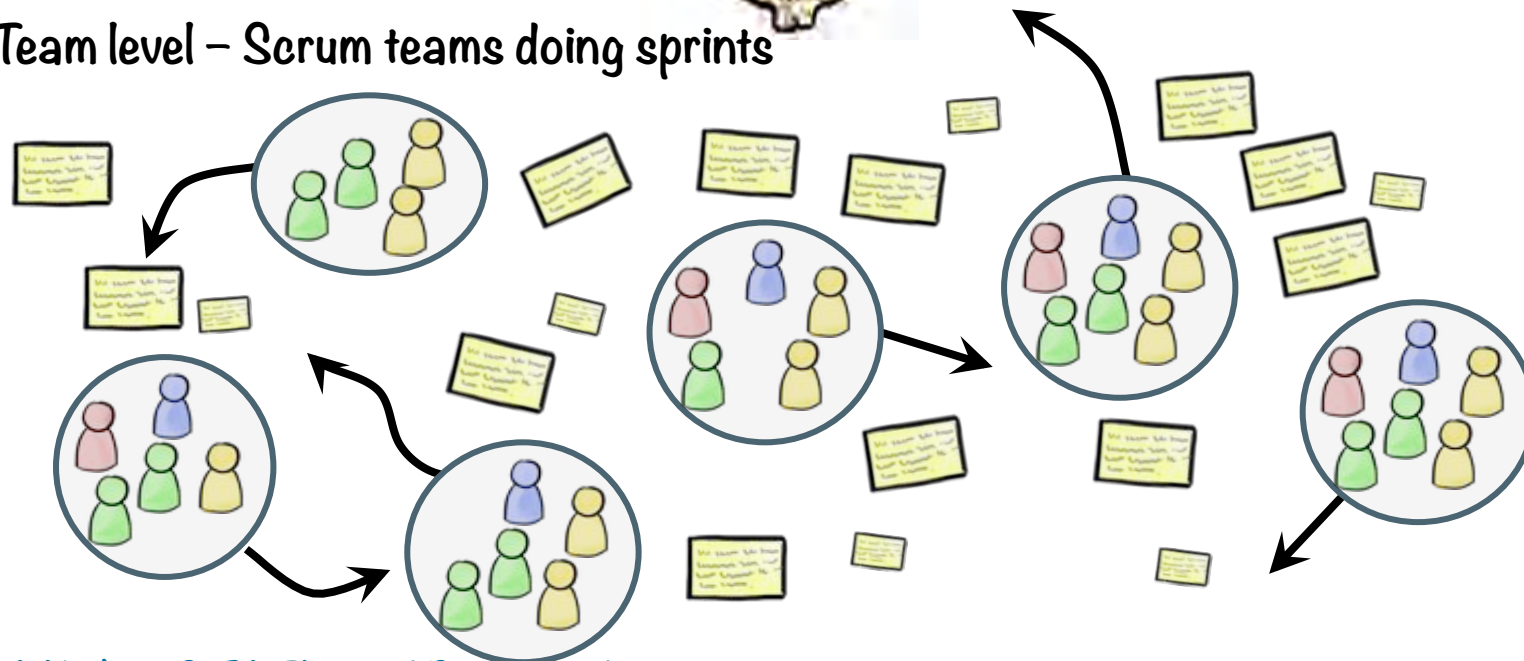
Portfolio level – stable yearly process, budget frames, long term planning



Program level – lots of meetings, spreadsheets, stress, and confusion



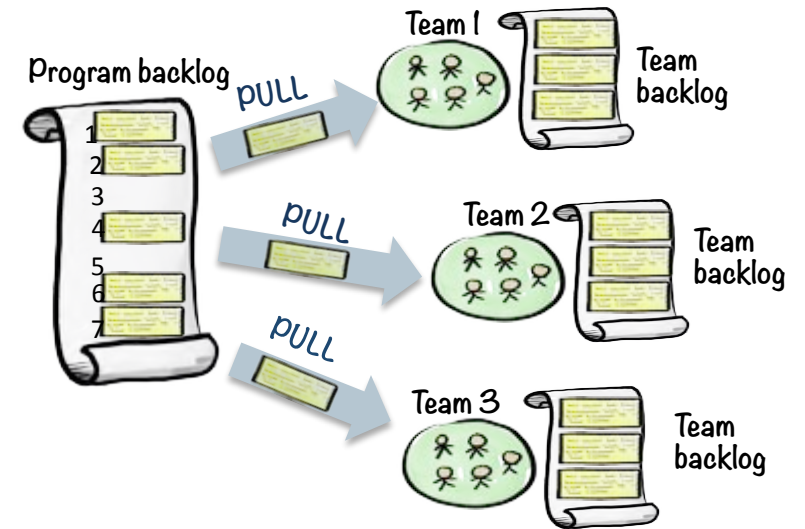
Team level – Scrum teams doing sprints



Henrik Kniberg & Eik Thyrdsted Brandsgård



Big-room planning



Henrik Kniberg



Dependency board



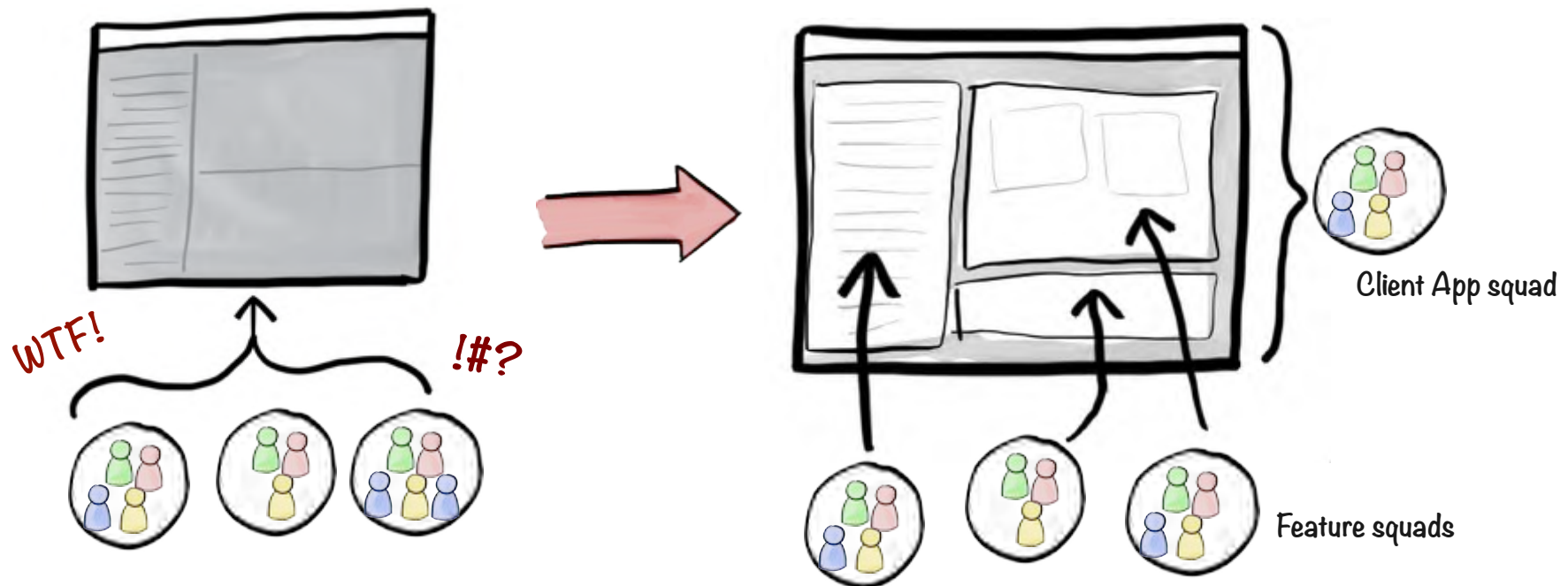
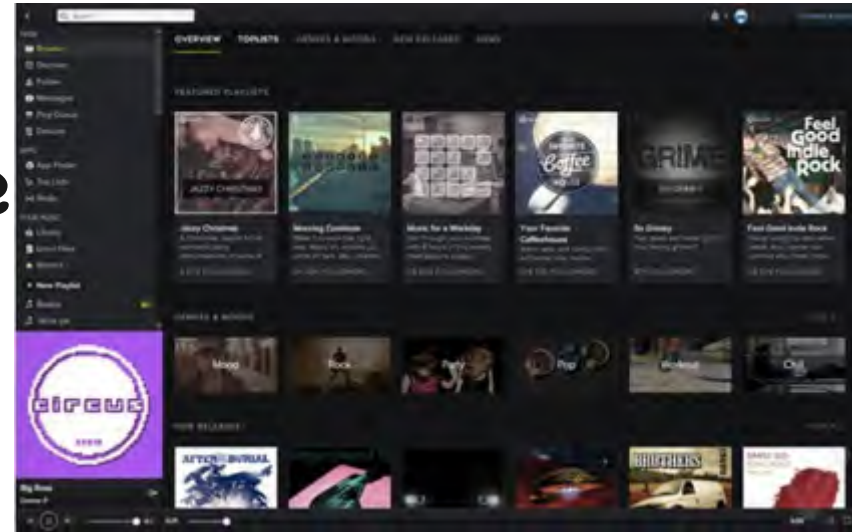



Scrum of Scrums





Decoupling to reduce the need for team sync

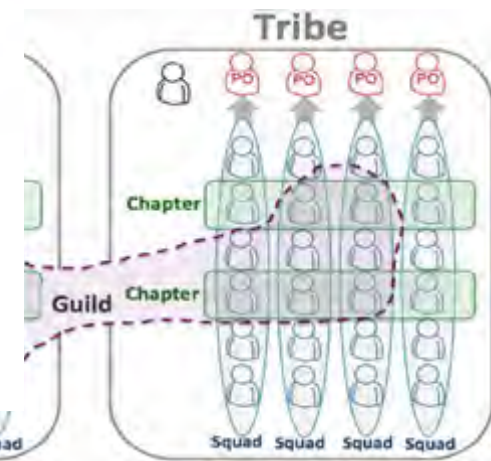
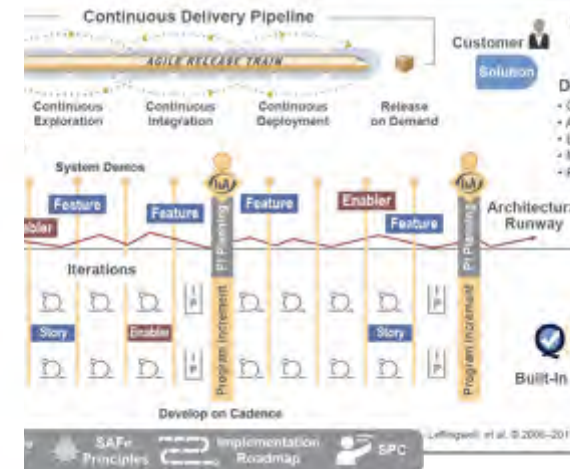
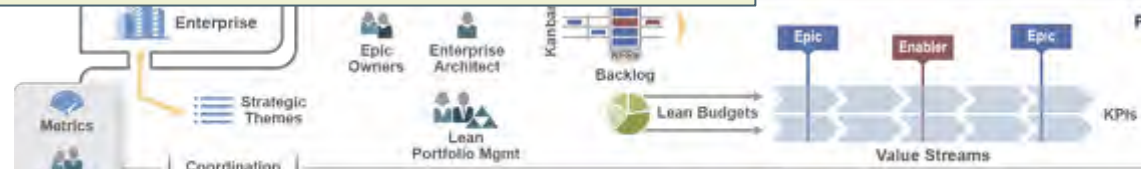




Frameworks are tools

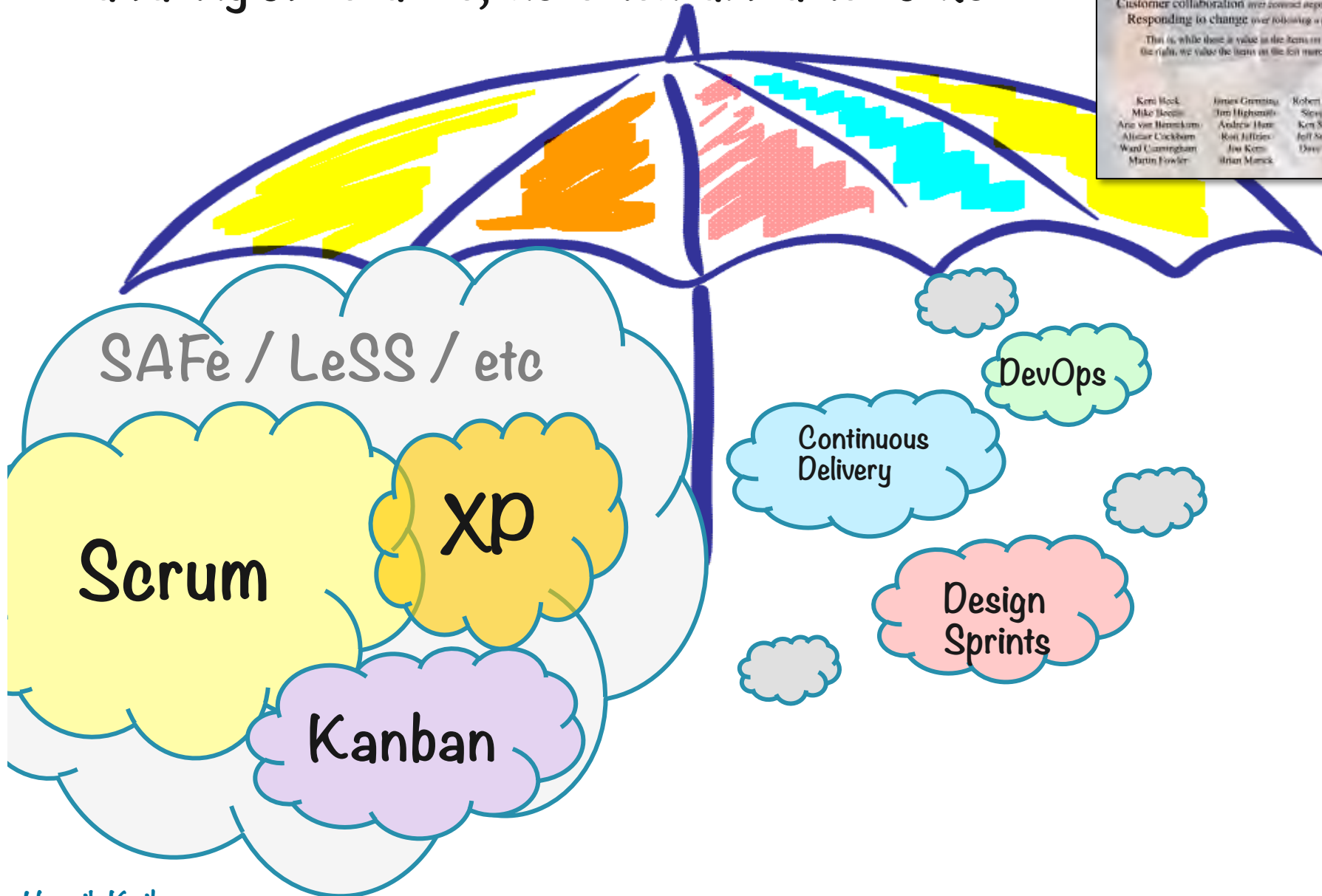
Frameworkitis (noun)

- Exaggerated belief that a framework will solve all problems
- Tendency to keep adding new frameworks and enlarging the existing ones.



Henrik Kniberg

Agile "umbrella" – a family of iterative, incremental frameworks



Frameworks are toolboxes

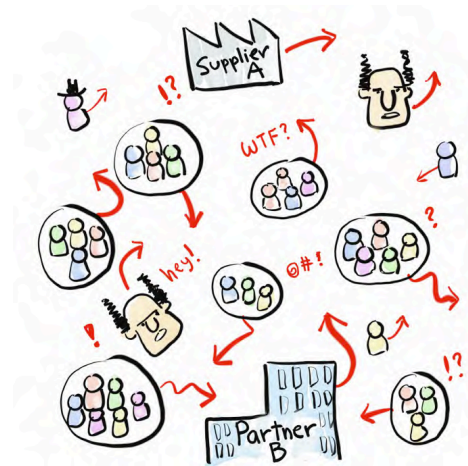




Wrapup

Lessons learned

- **Scaling hurts.**
Avoid whenever possible.



- **Frameworks are just tools.**
Don't fall in love with them.



- **Team-of-teams + Integration Cadence =**



DEMO OR DIE!

- **Self-organization is magic.**
But requires transparency, trust,
and a fast feedback loop.

