


Everyone wants Change, but nobody likes to Be Changed

AgileDays Keynote, Moscow
2011-03-04

Битва за Agile

Scrum и XP: заметки с передовой

Как мы делаем Scrum



Хенрик Книберг
Предисловие от Джеффа Сазерленда и Майка Кона

InfoQ Enterprise Software Development Series

Henrik Kniberg
Agile/Lean coach
www.crisp.se

Agile Board of
Alliance® directors



henrik.kniberg@crisp.se
070 4925284



SCRUM И КАНБАН: ВЫЖИМАЕМ МАКСИМУМ

ХЕНРИК КНИБЕРГ И МАТТИАС СКАРИН

Copyright notice

These slides are licensed under Creative Commons. Feel free to use these slides & pictures as you wish, as long as you leave my name and the Crisp logo somewhere.

For licensing details see:

<http://creativecommons.org/licenses/by/3.0/>

All slides available at:

<http://www.crisp.se/henrik.kniberg/>

Agile coach

Father



Both jobs involve Change

Have you ever felt that:

Yes, I understand Agile.

But how do I convince my
manager/customer/team/etc?



Henrik Kniberg



Purpose of this presentation

**Help you understand
what YOU can do
to trigger organizational change
and help your company become more agile.**

Yes, I understand Agile.

But how do I convince my
manager/customer/team/etc?

Short answer:

DON'T!



Henrik Kniberg



How do you like being
"convinced" by a salesperson?



Change starts with YOU

The only person you can control is YOU

(but barely)

If you can't change yourself, how can you expect to change anyone else?

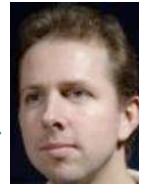


Your change

- Write down one thing that you want to change about yourself
- Why?

Spend less time doing Email

So I can go on a 6 month round-the-world trip with my family, without having to be online



Get more exercise

Treat other people better

Get a better job

?

Spend more time with your kids

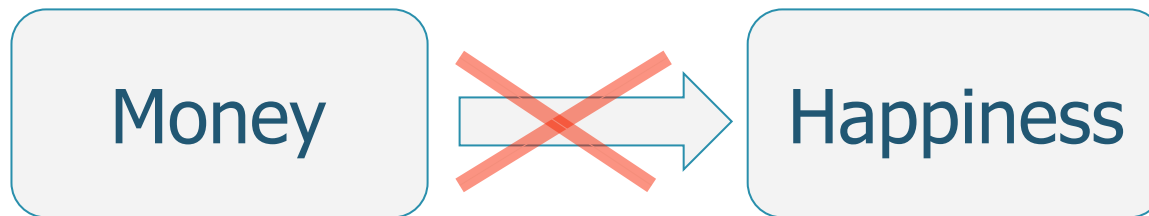
?

Earn more money

Be happier

Learn how to fly

Beware of false assumptions



Most research shows little or no connection between Money and Happiness!

Key elements of change

CURRENT LOCATION

Where am I right now?



NEXT STEP

What is the next step towards this destination?



PROGRESS METER

How will I know if I am moving in the right direction?

DESTINATION

What is the destination?

MOTIVE

Why do I want to go there?



Agile-манифест разработки программного обеспечения

Мы постоянно открываем для себя более совершенные методы разработки программного обеспечения, занимаясь разработкой непосредственно и помогая в этом другим. Благодаря проделанной работе мы смогли осознать, что:

Люди и взаимодействие важнее процессов и инструментов
Работающий продукт важнее исчерпывающей документации
Сотрудничество с заказчиком важнее согласования условий контракта
Готовность к изменениям важнее следования первоначальному плану

То есть, не отрицая важности того, что справа,
мы всё таки больше ценим то, что слева.

Основополагающие принципы Agile-манифеста

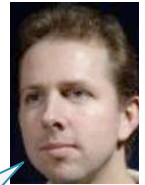
Мы следуем таким принципам:

- Наивысшим приоритетом для нас является удовлетворение потребностей заказчика, благодаря регулярной и ранней поставке ценного программного обеспечения.
- Изменение требований приветствуется, даже на поздних стадиях разработки. Agile-процессы позволяют использовать изменения для обеспечения заказчику конкурентного преимущества.
- Работающий продукт следует выпускать как можно чаще, с периодичностью от пары недель до пары месяцев.
- На протяжении всего проекта разработчики и представители бизнеса должны ежедневно работать вместе.
- Над проектом должны работать мотивированные профессионалы. Чтобы работа была сделана, создайте условия, обеспечьте поддержку и полностью доверьтесь им.
- Непосредственное общение является наиболее практичным и эффективным способом обмена информацией как с самой командой, так и внутри команды.
- Работающий продукт — основной показатель прогресса.
- Инвесторы, разработчики и пользователи должны иметь возможность поддерживать постоянный ритм бесконечно. Agile помогает наладить такой устойчивый процесс разработки.

Your change

- Describe the "destination" of your change. What does success look like? Feel like?
- What is your current situation?

By October I only need to do email once per week for max 2hrs, and I still don't feel behind on anything. And there's no big pile of email waiting for me when I get home



I usually check many times per day, and total time is 10+ hrs per week. If two days pass without checking email, I have over 100 emails waiting for me & I feel behind on things.

**Example:
cleaning up
room**

12

How do you get a 6-year old to clean his room?



Bad strategies



I'll give you ice-cream if you clean your room

You have to clean up your room now! Or else...



Look, I cleaned your room for you!

Goal / destination:

Clean room? ... well, not really.



My son takes responsibility for his room, and enjoys keeping it clean by himself without me having to remind him.

... so that I save time, and he learns a valuable skill for life.



Why it worked

First step: change myself

- "Coach"-mode instead of "Father"-mode
- => Don't force him to do anything
- => Don't do any of his work

CURRENT SITUATION

Stuff everywhere
No clear space



NEXT STEP

Pick up any single item,
decide where it lives,
put it there now (GTD)



PROGRESS METER

"Look how clean THIS part of the room is now!"

DESTINATION

Clean room

MOTIVE

Won't lose toys
Won't step on things
More space to play & create



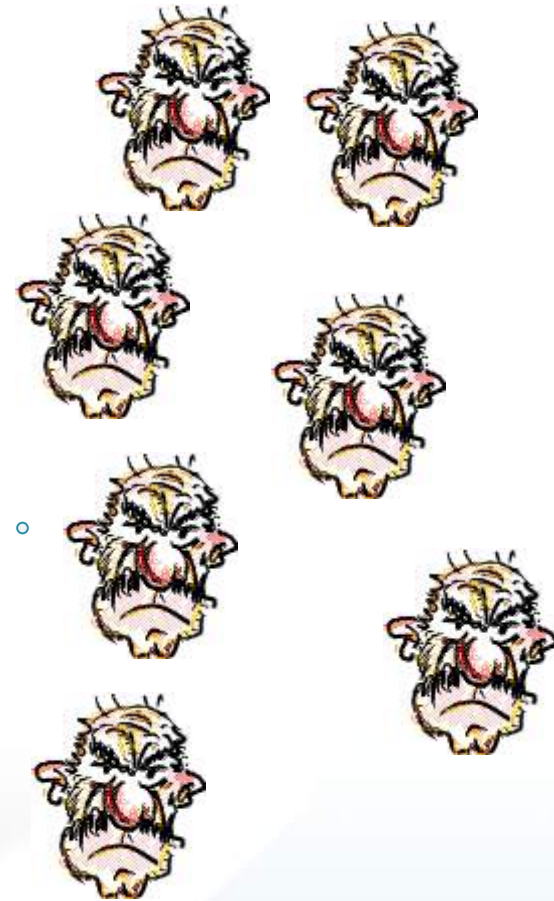
Pride of work: "Look <sister> at how clean my room is! Wouldn't you like your room to be as clean as mine? I can help you if you like"

Finding the path of least resistance

17

Who else is affected by this change?

And why should they want to change?



Causes of resistance



CURRENT SITUATION

Doesn't see the current situation



NEXT STEP

Doesn't see any path



PROGRESS METER

Don't see that we are making progress

DESTINATION

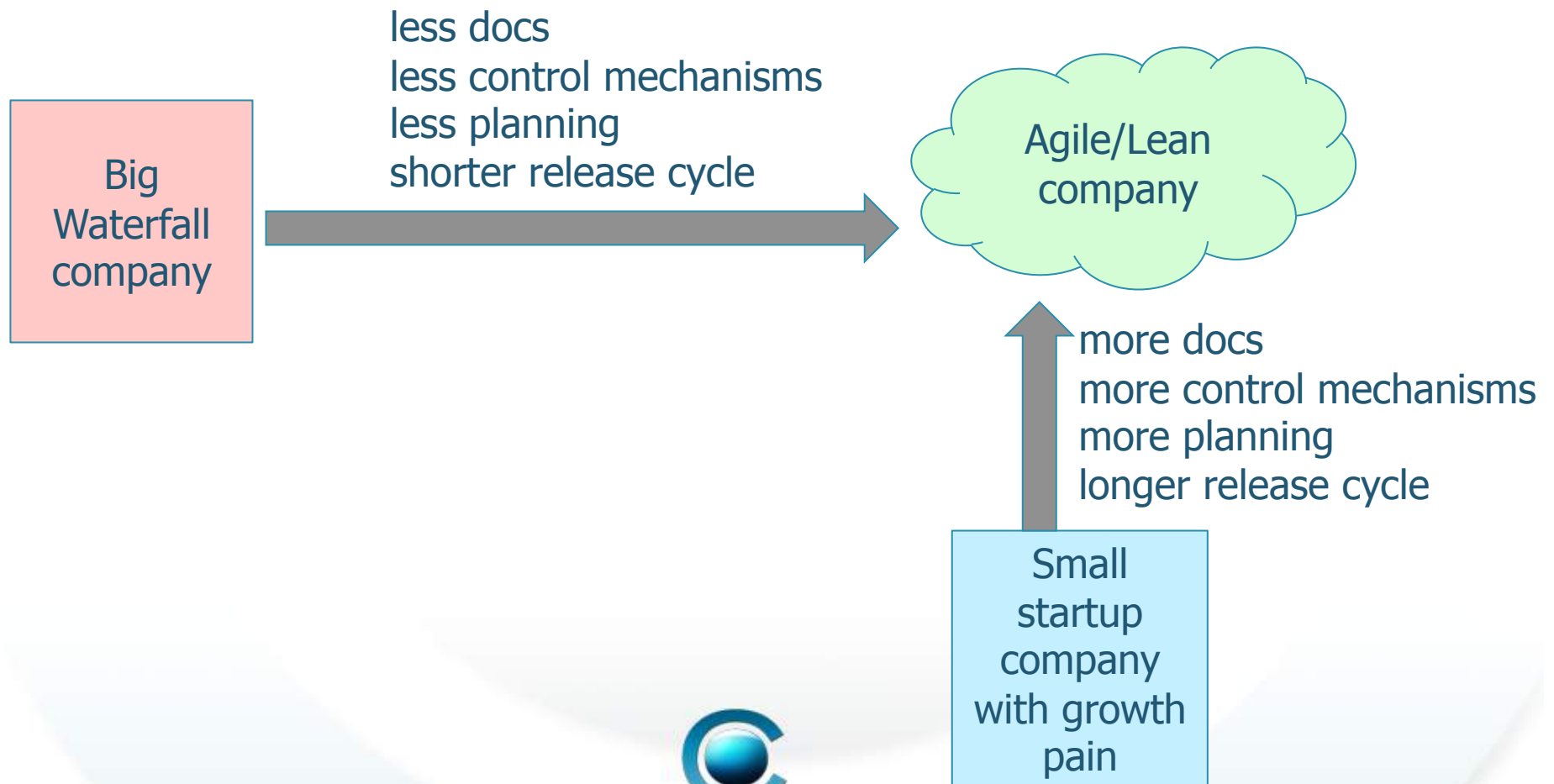
Doesn't understand the destination

MOTIVE

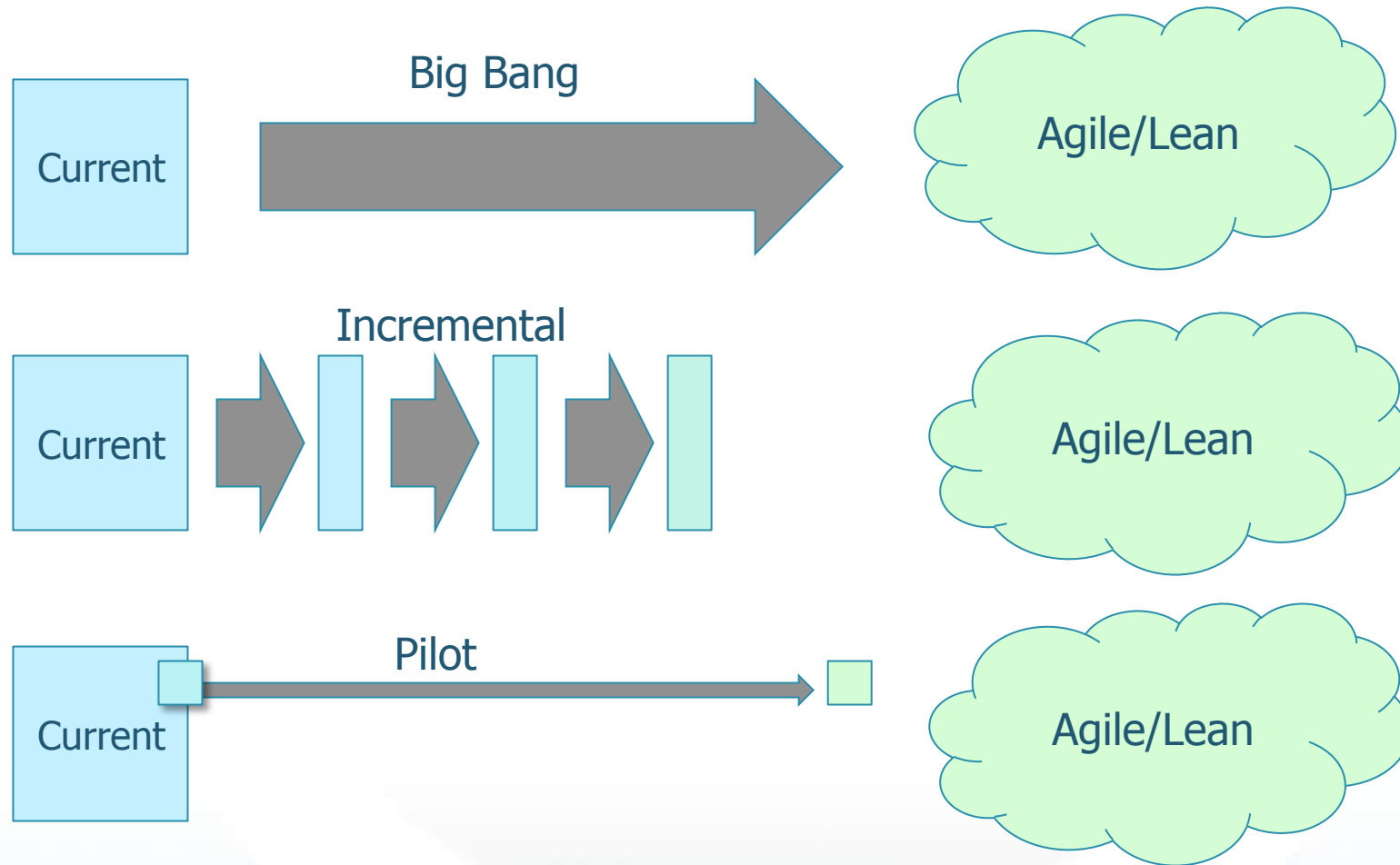
Doesn't want to go there



The path differs depending on where you come from



Choose the length & width of your path



**Strategy:
Avoiding the
"Not Invented
Here"
syndrome**

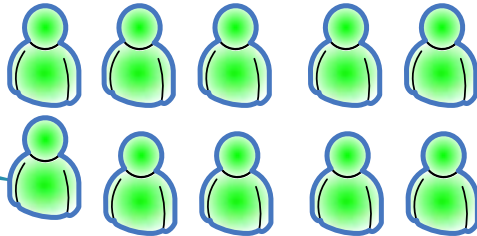
22

Not Invented Here syndrome



Do you want to go Agile?

Of course we do. But our managers will never let us.

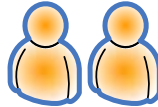


Developers



Do you want to go Agile?

Of course we do. But our customers will never let us.

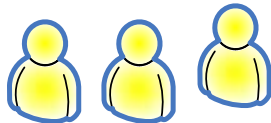


Managers



Do you want to go Agile?

Of course we do. But the developers will never manage it.

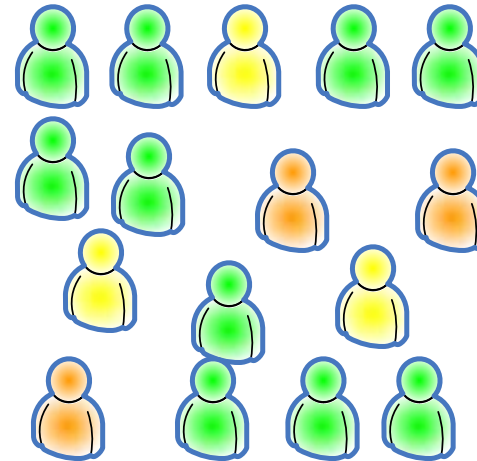


Customers

Let me tell you about Agile.
I'm not telling you that you must work
this way. I'm showing you what it is, so
that you can decide for yourself



Developers + Managers + Customers
All at once!



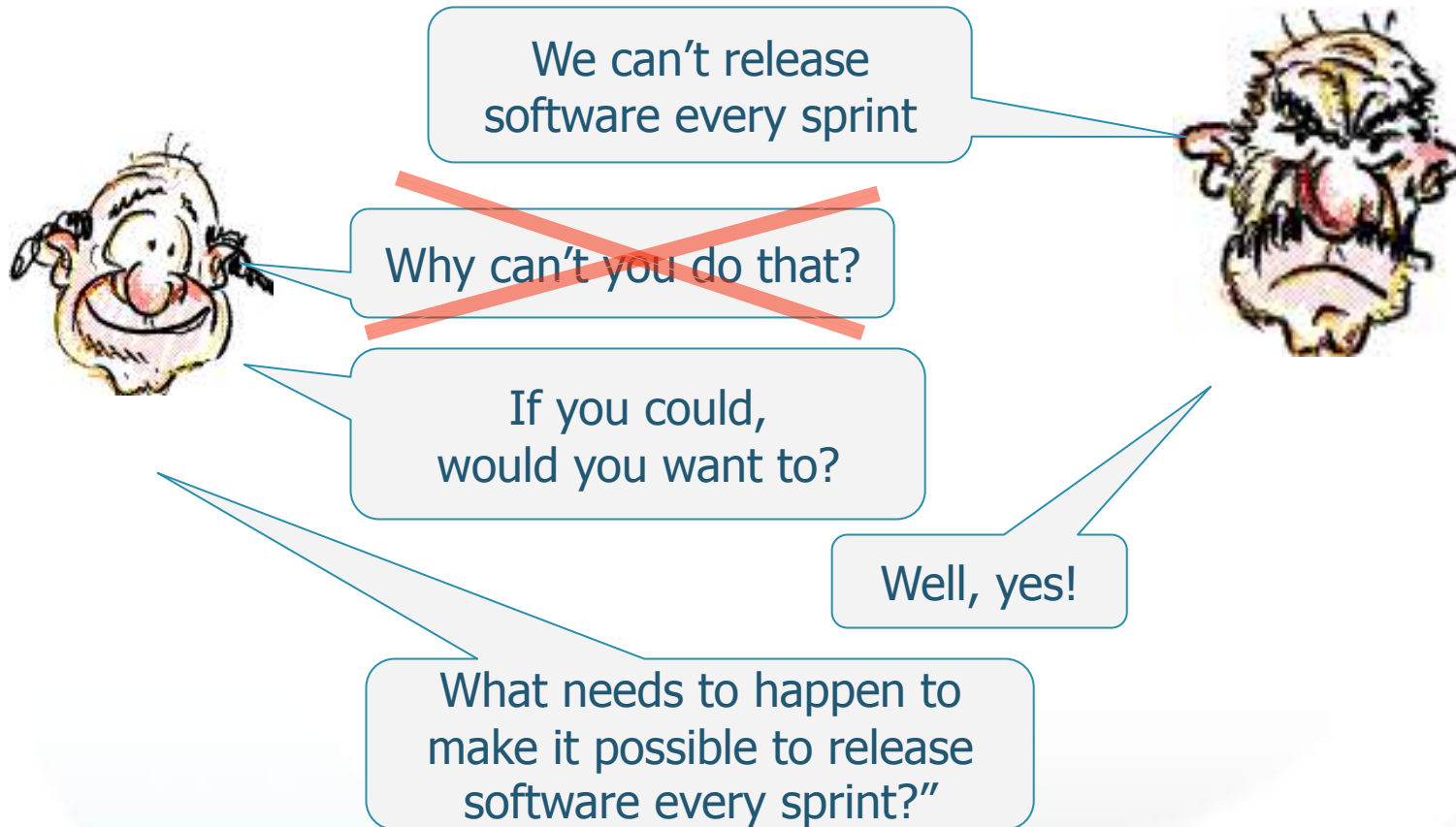
So what do you think?
Are you interested in moving in this direction?
Never mind How for the moment.

Yes!

OK what would be the first steps?
Let's brainstorm some options.

Ask the right question

“Why can’t you” => “How can you?”



“Wildfire method” / guerilla change

- Find combustible material in your local work area
- Set it on fire
- Once you see flame, pour gasoline on them
- Encourage multiple small fires to merge.
- The large fire will begin to spread itself



Henrik Kniberg

crisp

26

**Strategy: Make
the current
situation**

painfully visible

27



During the last few years, a new understanding of the process of organizational change has emerged. It is **not top-down or bottom-up**, but **participative at all levels**, aligned through a **common understanding of a system**.

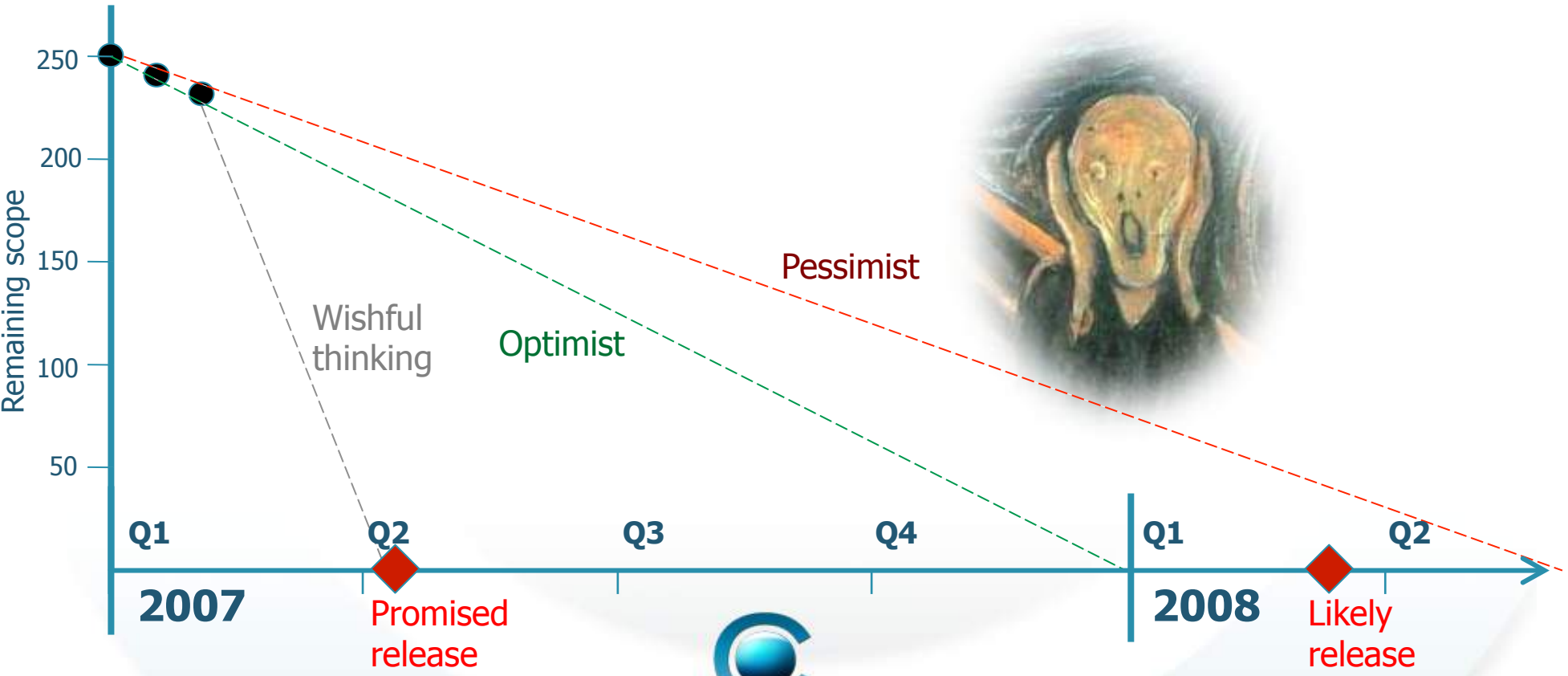
Peter Senge
Author of "The fifth discipline"

Example: Late project

Backlog = 250 points

Velocity = 10 points/sprint

25 sprints → > 1 year until release!



Death March

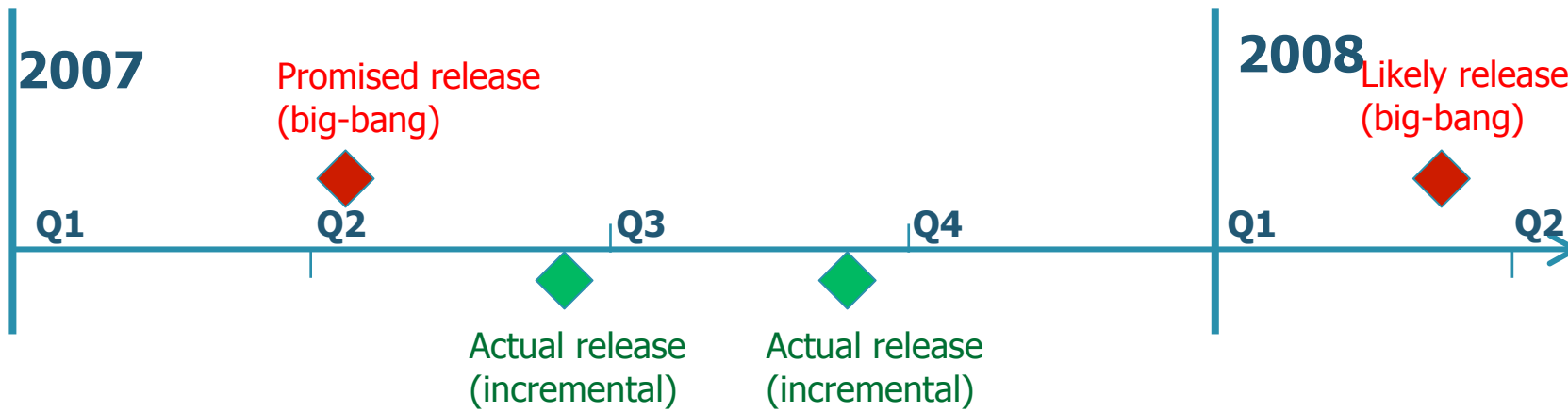


Backlog = 250 points

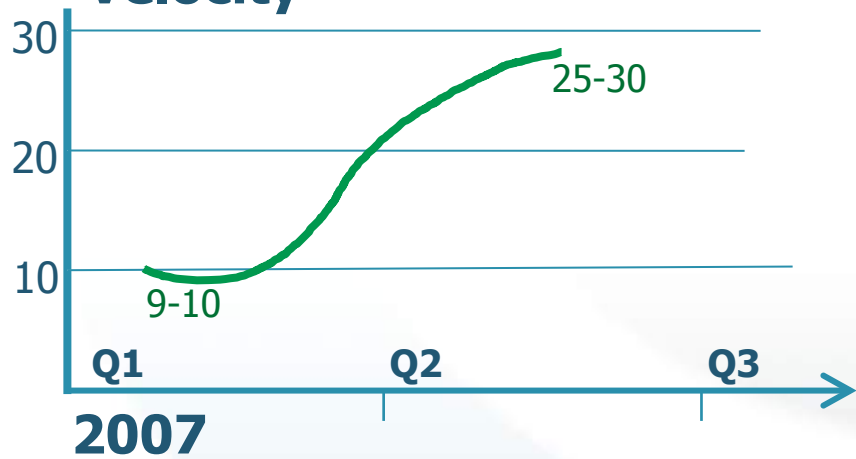
Velocity = 10 points/sp

Reduce by cutting scope

Increase by removing impediments



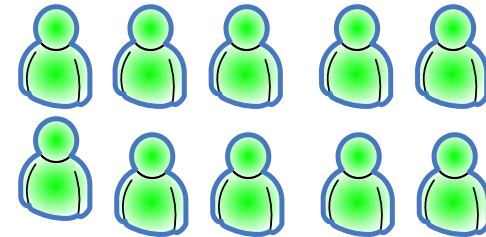
Velocity



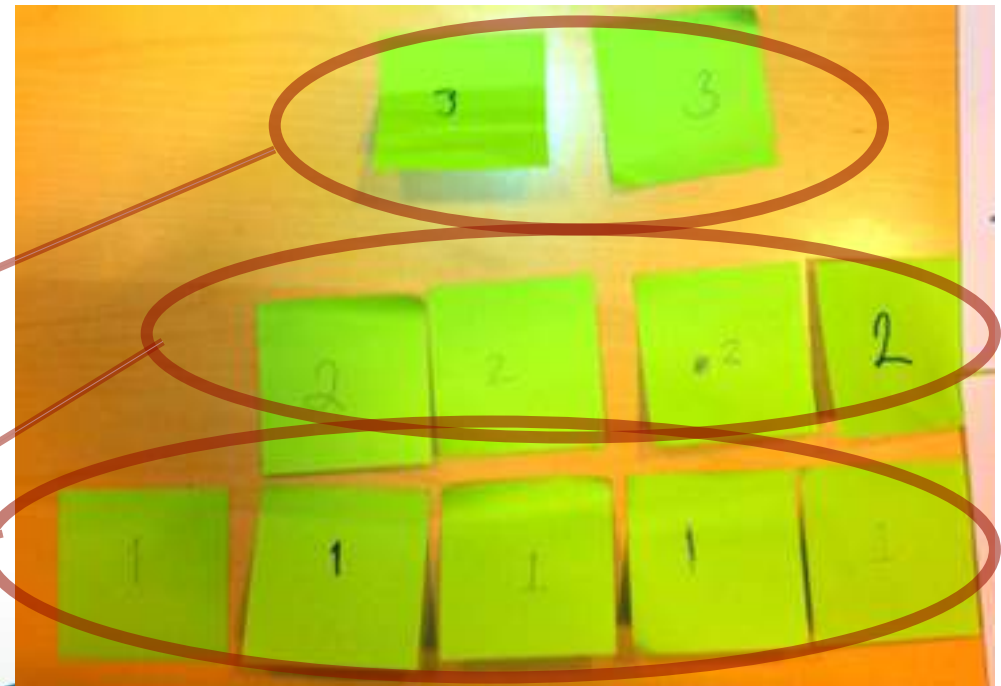
Sometimes subjective data is enough to detect a death march



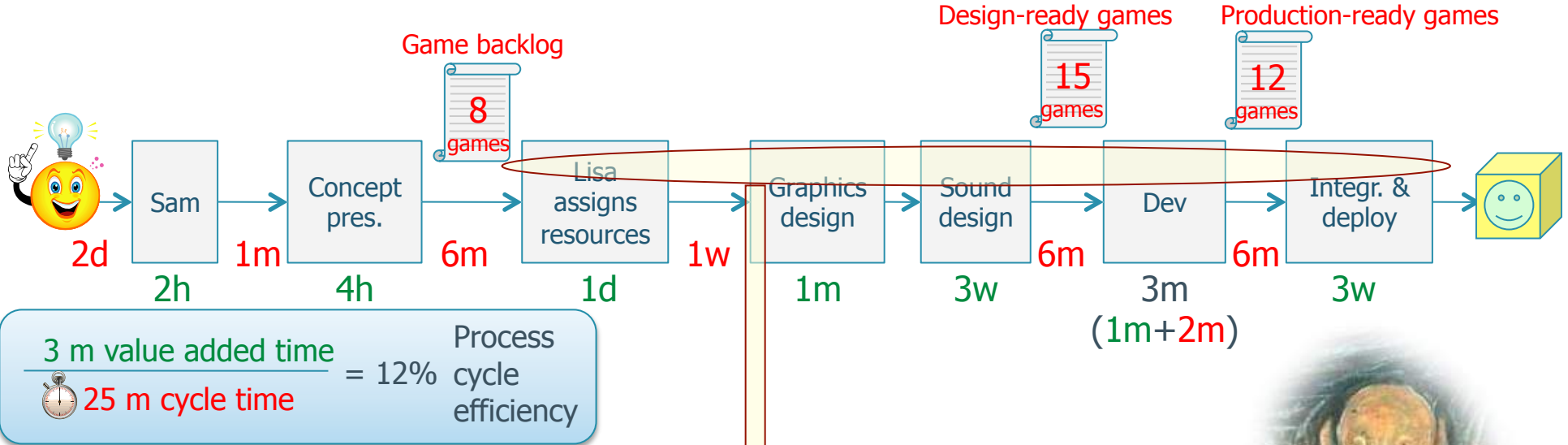
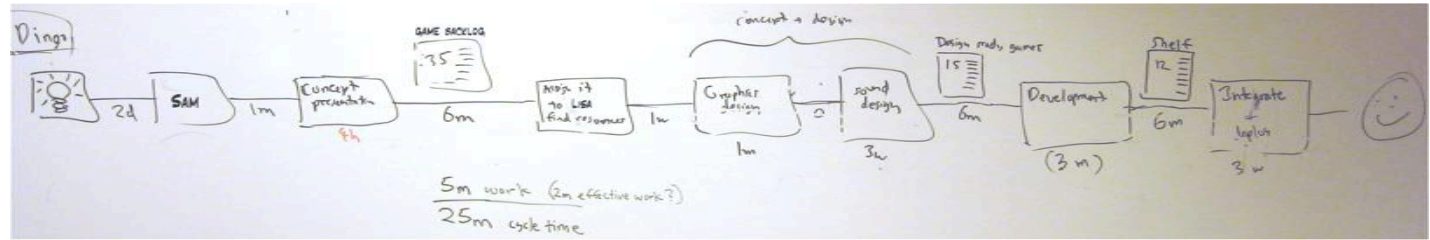
Do you believe the current goal is achievable?



- 5 = certainly
- 4 = probably
- 3 = barely
- 2 = probably not
- 1 = forget it



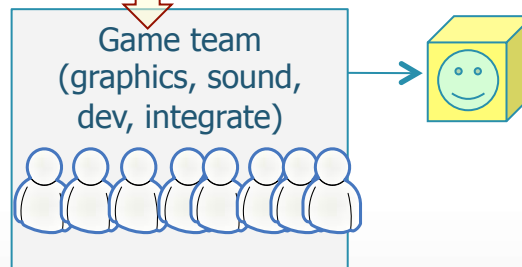
Before



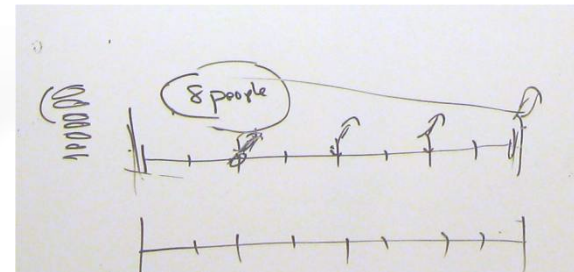
After

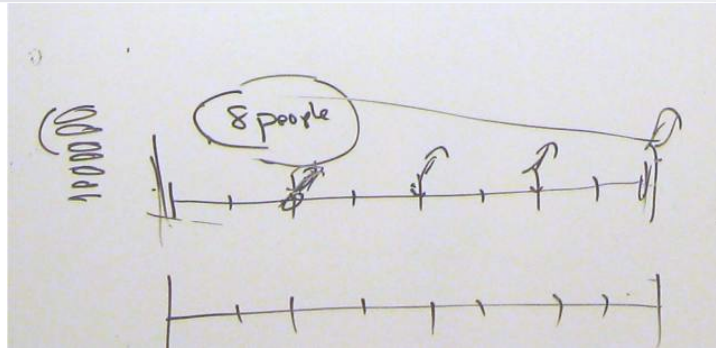
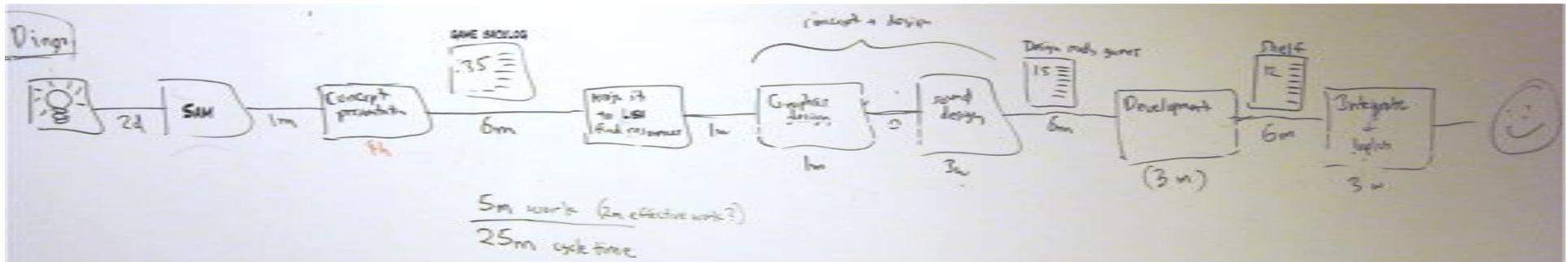
Cross-functional game team

3-4 m cycle time = 6-8x faster



3-4 months





This value stream was career-changing for me.

In the end, a two-hour exercise and some meetings had more impact than our two-year project



Estimated vs actual velocity

Estimada	Actual
40	30
40	30
40	30

Estimada	Actual
40	30
50	30
60	30



Dead Sprint Detection



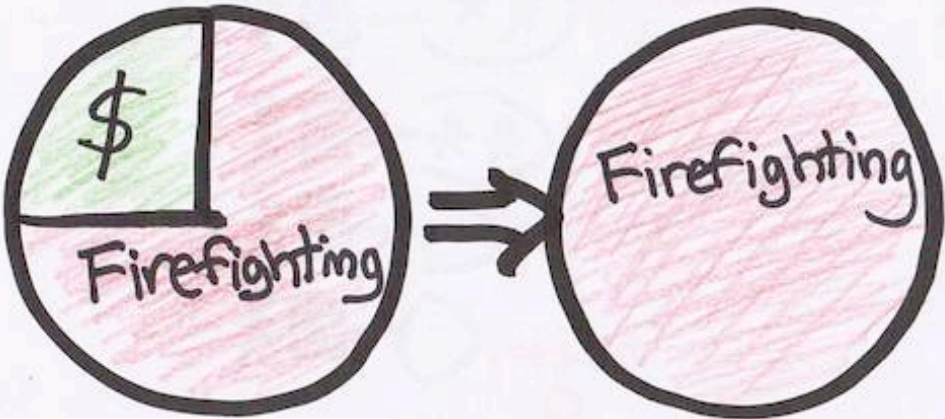
NOT CHECKED OUT	CHECKED OUT	DONE! :o)	SPRINT GOAL: BETA-READY RELEASE!
<p>DEPOSIT</p> <ul style="list-style-type: none"> Integr test 2d Code cleanup 0.5d DAO 1d 			<p>BURNDOWN</p>
<p>MIGRATION TOOL</p> <ul style="list-style-type: none"> GUI spec 2d Tapestry spike 1d Impl migration 8d 			
<p>BACKOFFICE LOGIN</p> <ul style="list-style-type: none"> Impl GUI 1d Write failing test 2d Integr. with JBoss 2d 			
<p>BACKOFFICE USER ADMIN</p> <ul style="list-style-type: none"> Write failing test 3d 			
<p>GUI design (CSS)</p> <ul style="list-style-type: none"> Clarify requirements 2d Impl GUI 6d 			
			<p>UNPLANNED ITEMS</p> <ul style="list-style-type: none"> Fix me (JIRA) 2d DB admin stuff 8d Meeting with Joe 6d Fix bug #112 Write paper bug <p>NEXT</p> <ul style="list-style-type: none"> WITHDRAW

How do we spend our time?



Current situation

Likely future situation



Henrik Kniberg



Compare options (including the No Change option)



No, I don't want to try kanban

OK, let's try kanban.

No way!
Too painful!

No way!
Too difficult!

Option:
Keep doing "broken Scrum"

- Sprints that don't end
- Features that can't be completed by any single team
- ...etc...

Option:
Do Scrum properly

- Features broken down small enough to fit in a sprint
- Feature teams that can start and finish a whole feature within 1 sprint
- Running, tested software after every sprint

Option:
Use Kanban to gradually improve the current process

- Big shared taskboard showing end-to-end progress
- Limit work in progress



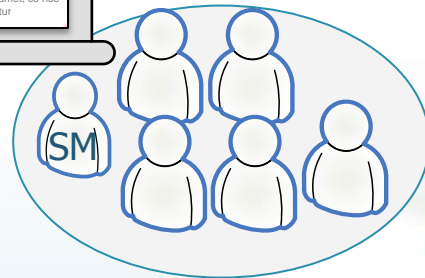
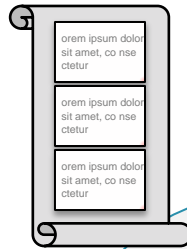
Identify top 3 impediments (problems/blockers)

- No clear Definition of Done
- Increasing technical debt
- Slow computers

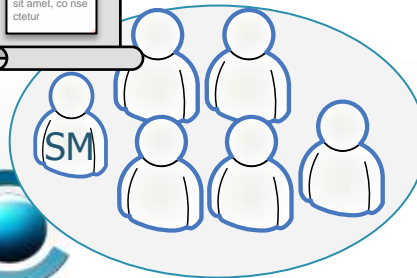
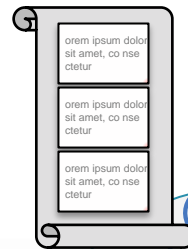
Manager



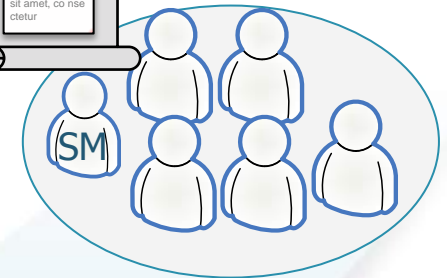
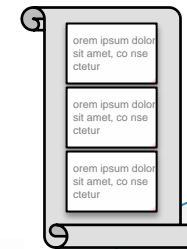
Top 3 impediments

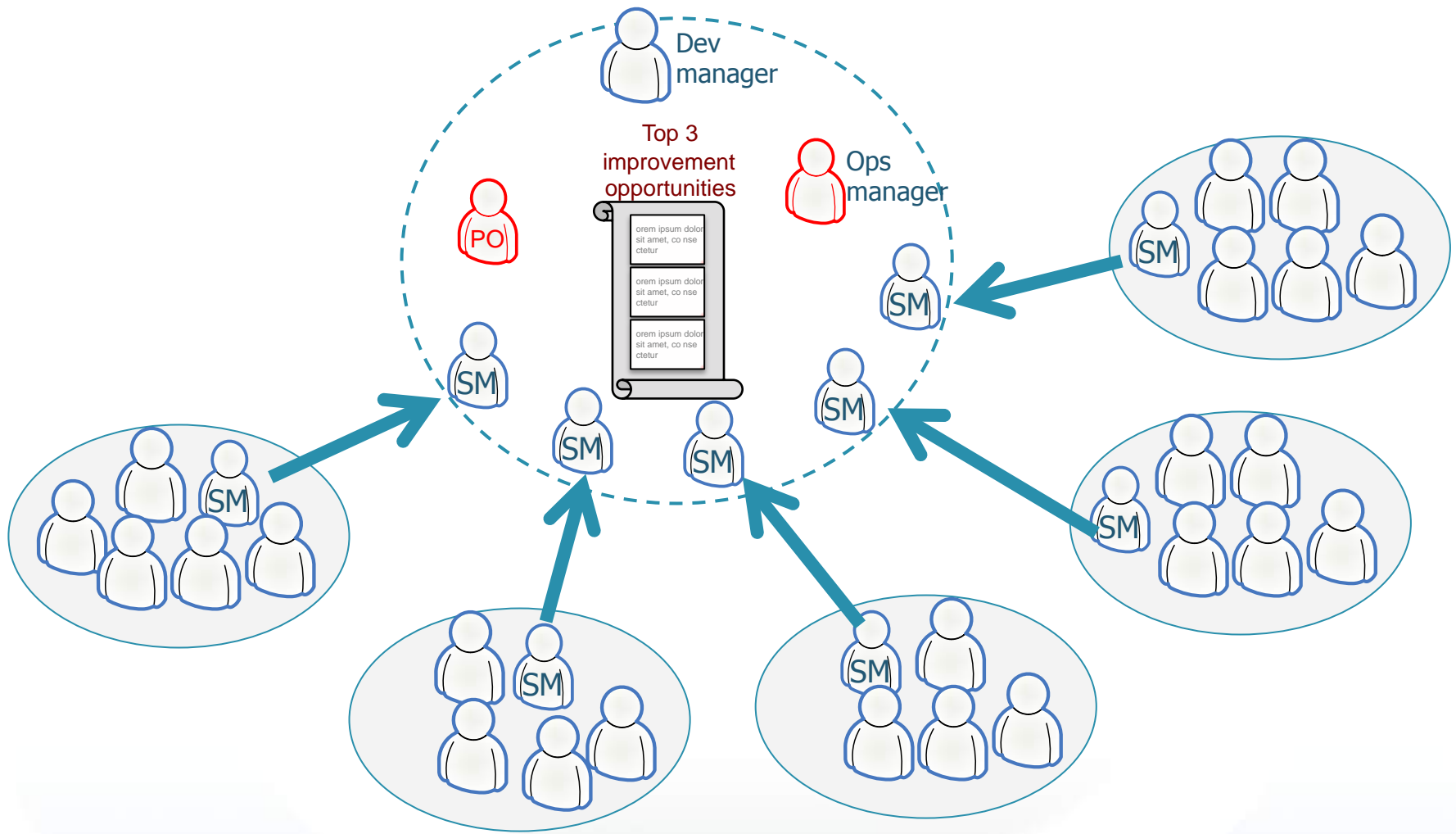


Top 3 impediments



Top 3 impediments





Happiness Index

Lack of motivation

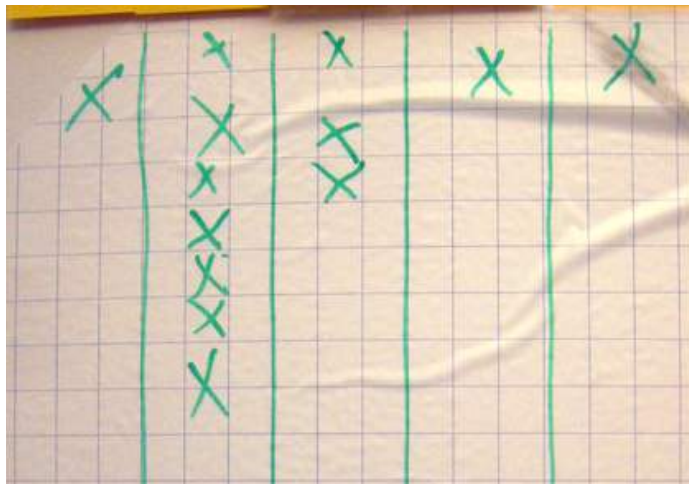
.....

.....



"How does it feel to come to work?"
(scale 1-5)

1 2 3 4 5

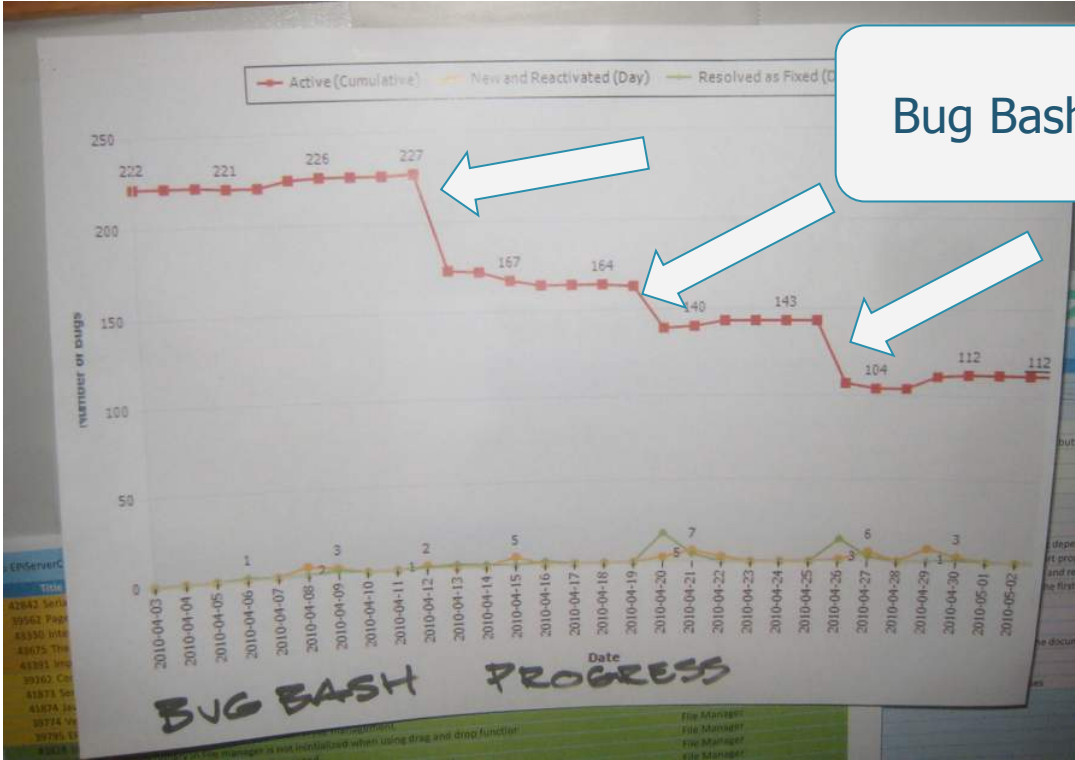


Product owner moves closer to developers

Managers & developers talk about motivation

.....

Reorganization in management team

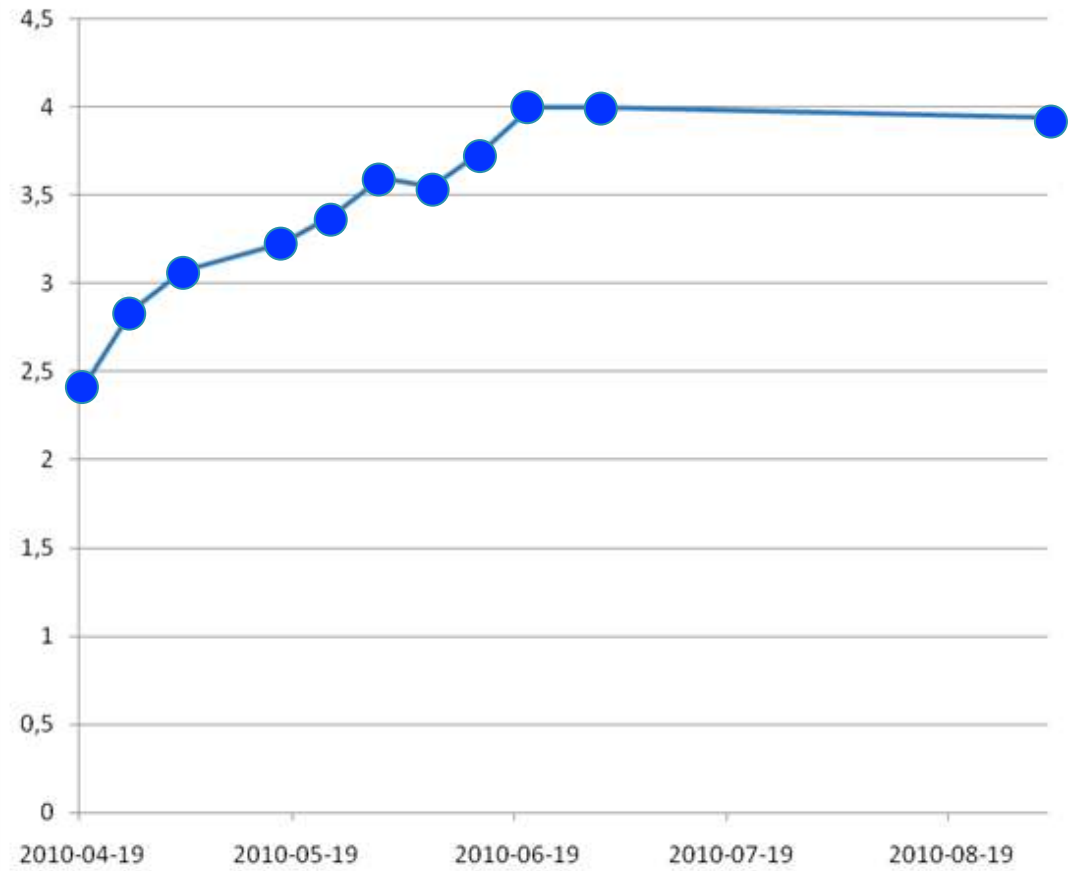


Bug Bash tuesdays

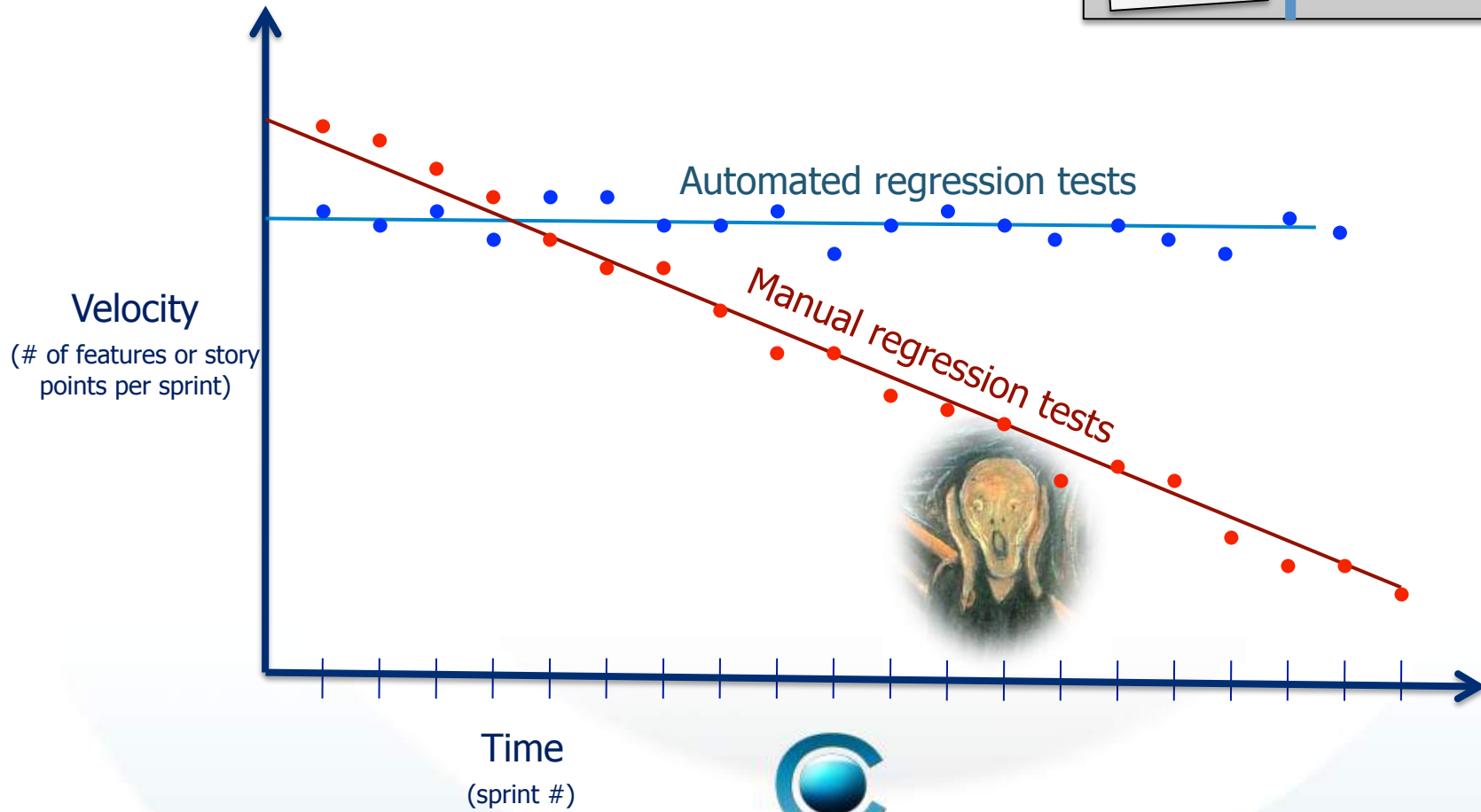
.....

Result

Happiness Index



To do	Doing	Done
		Register
	Withdraw	Deposit
Transfer		



**Strategy:
Small, clear
steps**

46

Step 1: Decide what needs to be tested

- Change skin
- Security alert
- Transaction history
- Block account
- Add new user
- Sort query results
- Deposit cash
- Validate transfer

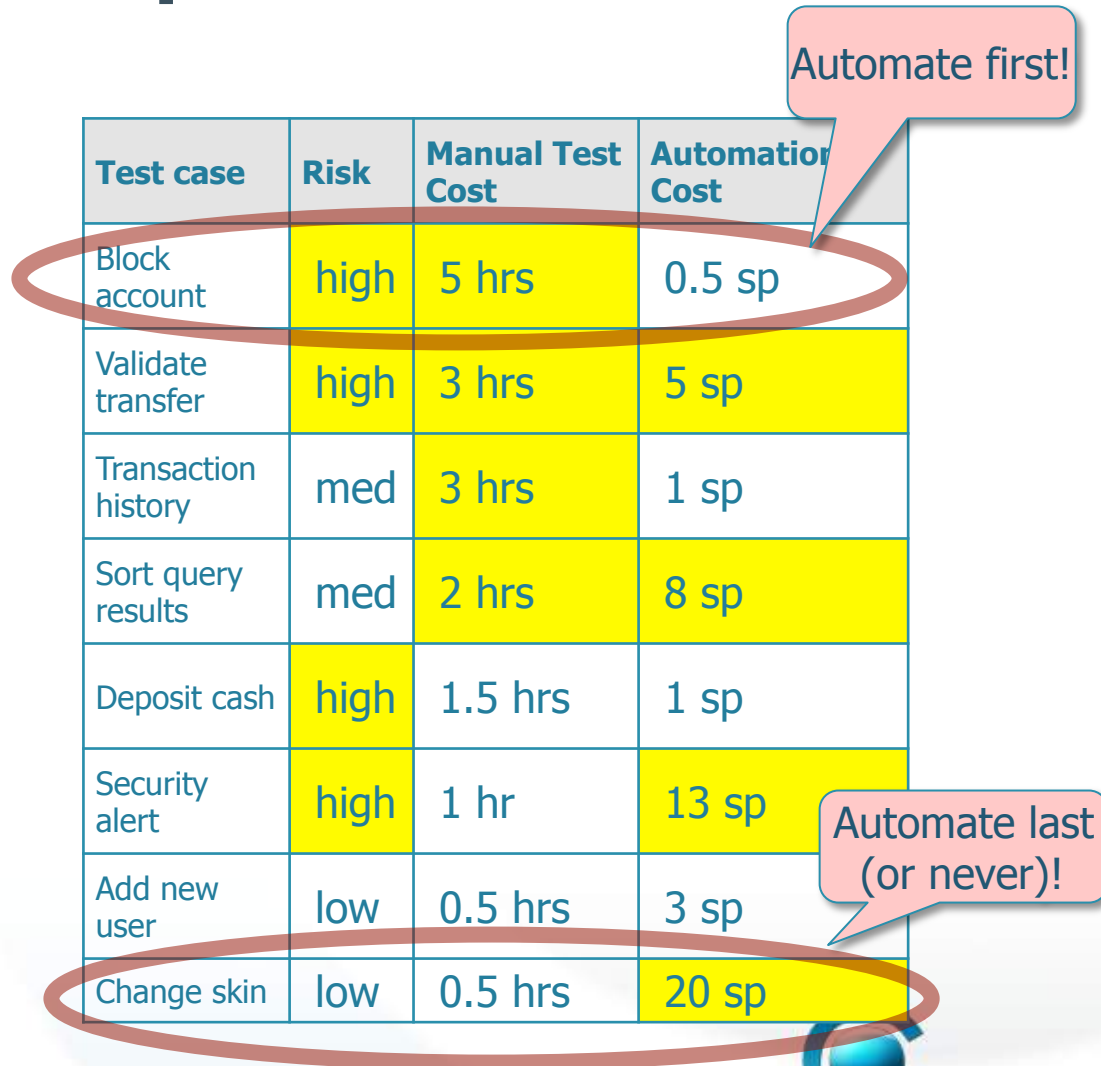
Step 2: Classify each test

Pay every
time

Pay once

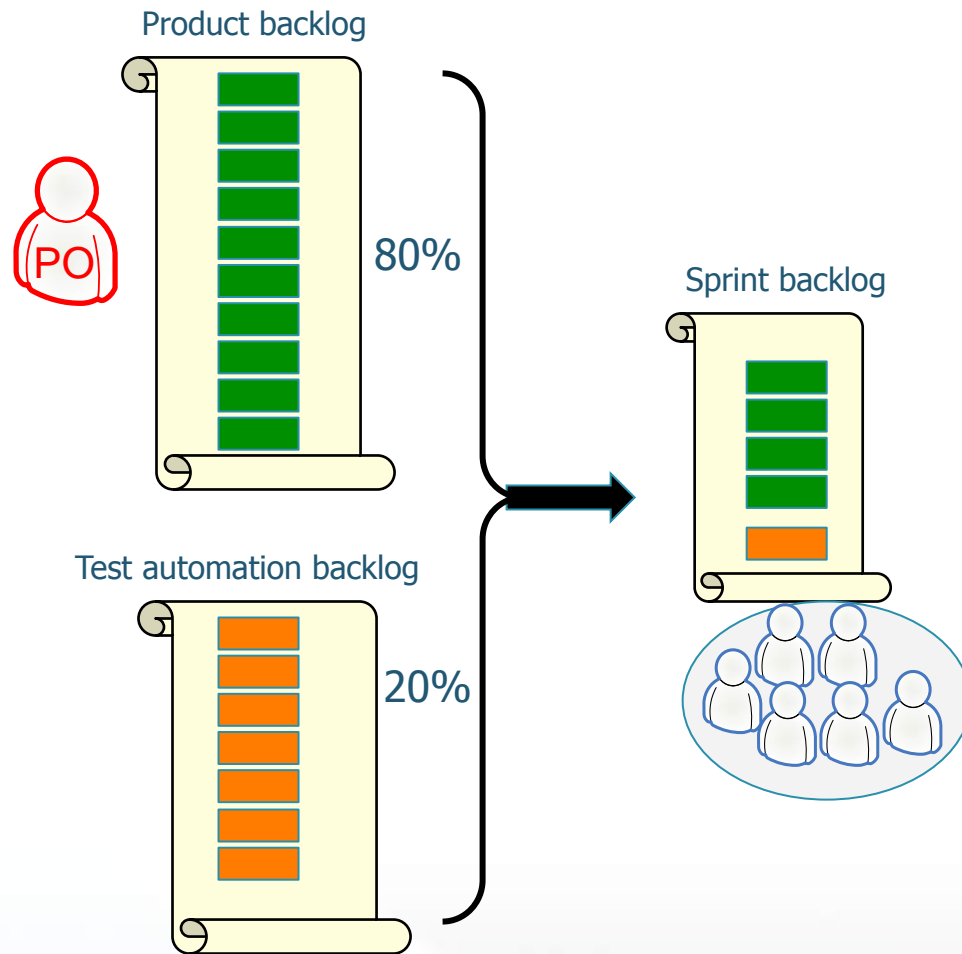
Test case	Risk	Manual Test Cost	Automation Cost
Change skin	low	0.5 hrs	20 sp
Security alert	high	1 hrs	13 sp
Transaction history	med	3 hrs	1 sp
Block account	high	5 hrs	0.5 sp
Add new user	low	0.5 hrs	3 sp
Sort query results	med	2 hrs	8 sp
Deposit cash	high	1.5 hrs	1 sp
Validate transfer	high	3 hrs	5 sp

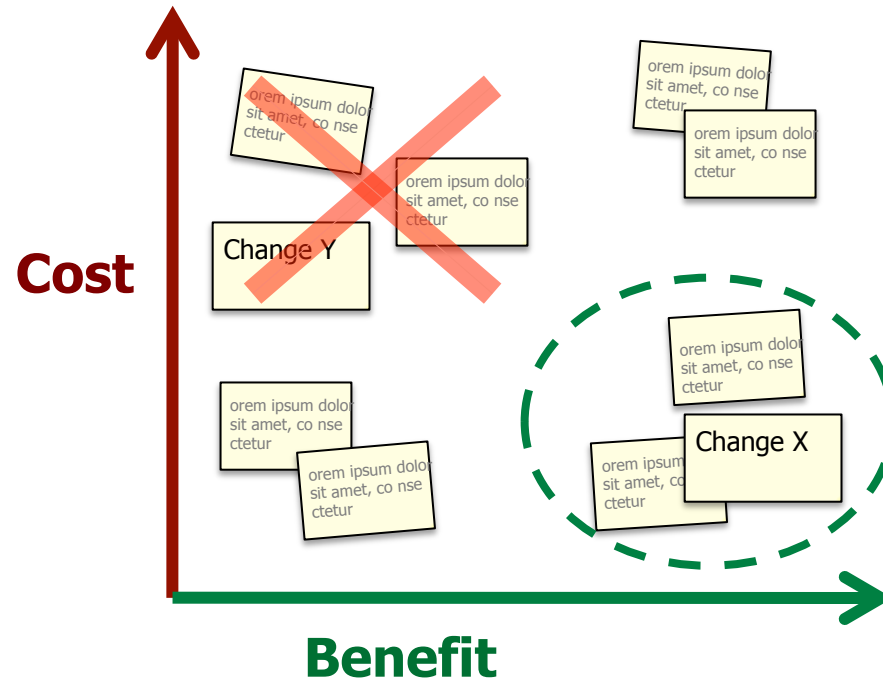
Step 3: Sort the list



Test case	Risk	Manual Test Cost	Automation Cost
Block account	high	5 hrs	0.5 sp
Validate transfer	high	3 hrs	5 sp
Transaction history	med	3 hrs	1 sp
Sort query results	med	2 hrs	8 sp
Deposit cash	high	1.5 hrs	1 sp
Security alert	high	1 hr	13 sp
Add new user	low	0.5 hrs	3 sp
Change skin	low	0.5 hrs	20 sp

Step 4: Allocate capacity



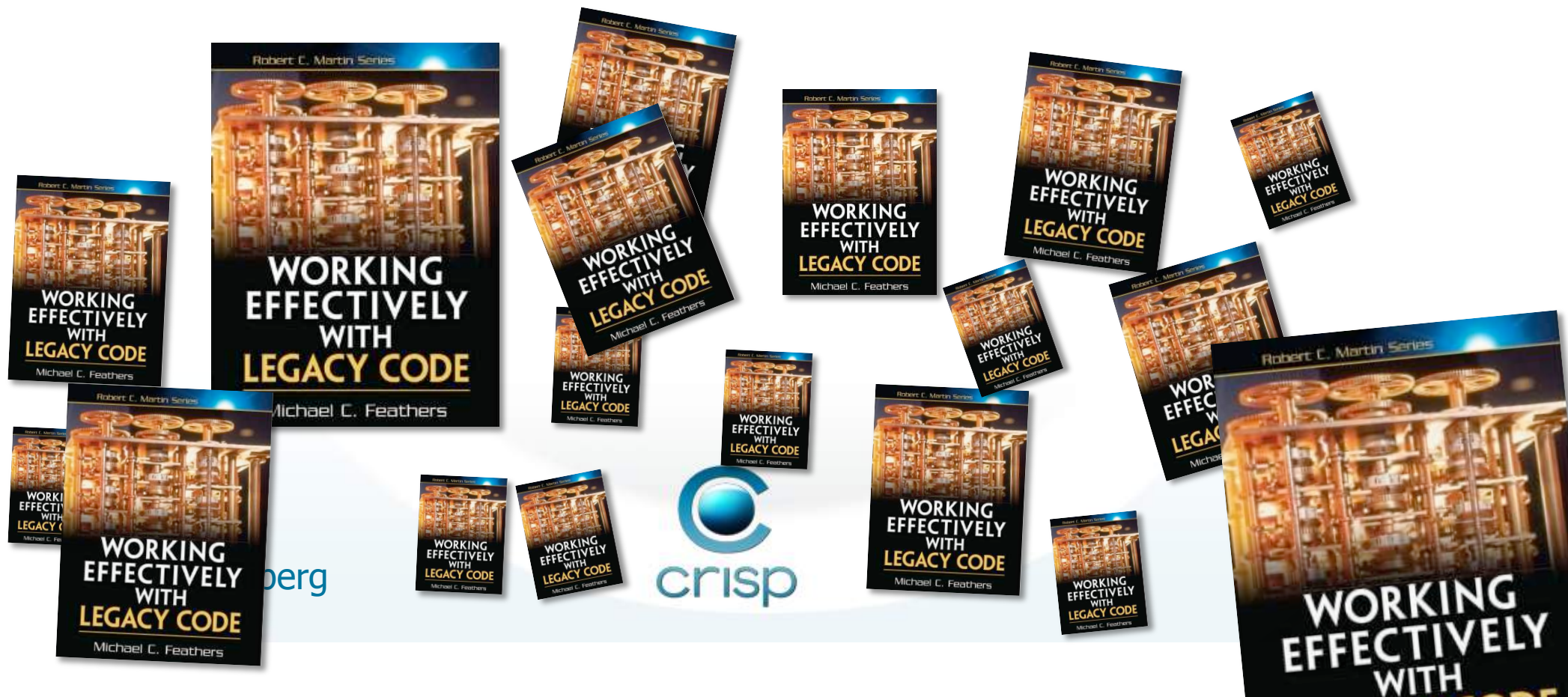


**Strategy:
External
"expert"
validation**

52

External “expert” validation

- Inform people about upcoming events/conferences
- Invite an inspirational speaker to come in
- “Drop” articles and books at strategic locations



Strategy:

Set an example

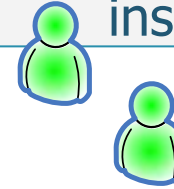
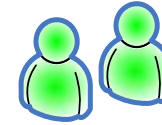
54



How about if we install a CI server?

Nah, don't have time.

Don't think we have a place to install it



A few days later...

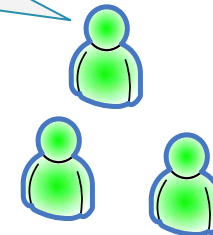


Um, Joe, you just broke the build. Again.

Ooops. Thanks. How do you keep detecting that so fast?

I got a CI server running on my machine

Cool! Can you make it test my branch too?



Let's install the CI on a shared server, so it works even when you aren't here.

**Strategy:
Reversible
"experiments"**

56



People do not truly believe
in new things unless they
have actually had personal
experience of them

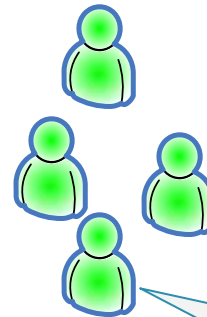
Niccolò Machiavelli





Are you willing to TRY pair programming for one sprint? If you don't like it after that, I won't bring it up again.

We don't think pair programming works



OK

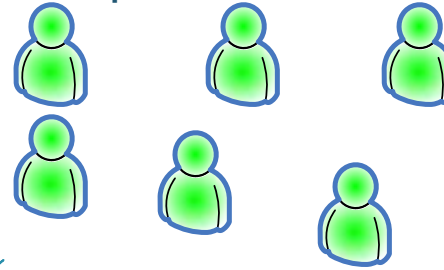


Are you willing to TRY sitting together for one sprint? We don't need to formally change the organization.

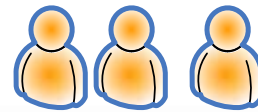
OK

OK

Developers



Testers



**Strategy: Make
a business case
for your change**

60

Sample business case for change

- **Team estimates that our velocity would increase by 50% if we sit together.**
- **This means we can release 2 months early. What is the business value of that?**
- **What is the cost of tearing down this wall so that the team can sit together?**



**Tip: Don't mix
up "problems"
with "fears"**

62



Are you sure? Have they complained in the past when you have worked in pairs?

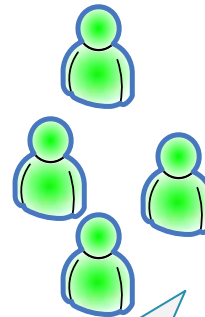
Well, actually, no they haven't.

So that just a fear, not an actual problem.

Tell him that about the feature that you are developing.

And if he asks about the pair programming, that's a great opportunity to discuss productivity.

Managers will complain if we pair-program. It looks inefficient.



True. But what should we say if a manager asks what we are doing?

**Strategy: Ask
for forgiveness
rather than
permission**

64

Example: "Do we really need to produce all these documents?"

Configuration Audit Findings.doc

lkjdfjh sdfkjsdfkjh sdfkjh dfjkh kjhhdjggd fjh dfhg sdkjhdrg dfkj hdfjhgdfkjhdhfhg dfkjh df kd dlk
dfk jdfklj lkjdhkhkkkjkd jkdjdf fjk djh sdfkj sdfjh dfkj dfhj d dkjdkkkd jd fjfd hdjjs dfjhbsdfkjh
sdlkjviuhwjkbdsdfkjsd bcjds h. dkf fjk djh sdfkj sdfjh dfkj dfhj d dkjdkkkd jd fjfd hdjjs
dfjhbsdfkjh sdlkjviuhwjkbdsdfkjsd bcjds h.

lkjdfjh sdfkjsdfkjh sdfkjh dfjkh kjhhdjggd fjh dfhg sdkjhdrg dfkj hdfjhgdfkjhdhfhg dfkjh df kd dlk
dfk jdfklj lkjdhkhkkkjkd jkdjdf fjk djh sdfkj sdfjh dfkj dfhj d dkjdkkkd jd fjfd hdjjs dfjhbsdfkjh
sdlkjviuhwjkbdsdfkjsd bcjds h. dkf fjk djh sdfkj sdfjh dfkj dfhj d dkjdkkkd jd fjfd hdjjs
dfjhbsdfkjh sdlkjviuhwjkbdsdfkjsd bcjds h.

lkjdfjh sdfkjsdfkjh sdfkjh dfjkh kjhhdjggd fjh dfhg sdkjhdrg dfkj hdfjhgdfkjhdhfhg dfkjh df kd dlk
dfk jdfklj lkjdhkhkkkjkd jkdjdf fjk djh sdfkj sdfjh dfkj dfhj d dkjdkkkd jd fjfd hdjjs dfjhbsdfkjh
sdlkjviuhwjkbdsdfkjsd bcjds h. dkf

If you see this line, I'll buy you beer! joe@example.com

lkjdfjh sdfkjsdfkjh sdfkjh dfjkh kjhhdjggd fjh dfhg sdkjhdrg dfkj hdfjhgdfkjhdhfhg dfkjh df kd dlk
dfk jdfklj lkjdhkhkkkjkd jkdjdf fjk djh sdfkj sdfjh dfkj dfhj d dkjdkkkd jd fjfd hdjjs dfjhbsdfkjh
sdlkjviuhwjkbdsdfkjsd bcjds h. dkf fjk djh sdfkj sdfjh dfkj dfhj d dkjdkkkd jd fjfd hdjjs
dfjhbsdfkjh sdlkjviuhwjkbdsdfkjsd bcjds h. djh sdfkj sdfjh dfkj dfhj d dkjdkkkd jd fjfd hdjjs
dfjhbsdfkjh sdlkjviuhwjkbdsdfkjsd bcjds h. dkf fjk djh sdfkj sdfjh dfkj dfhj d dkjdkkkd jd fjfd
hdjjs dfjhbsdfkjh sd

sdfkjasdf
asdfkjasdfkjh
dsfkljasdfkjh

asdfkjasdfkjasdf as
sdfkjasdfkjh asdfk
asdfkjasdfkjh asdfk
dfkjdfjh dfkj dfjh df

If you see this line, I'll buy you beer! joe@example.com

Configuration Audit Findings.doc

If you need to read this document please email joe@example.com and tell me why you need it and when.

Example: Bootstrapping pattern

66

Step 1: Ask “Why change?”

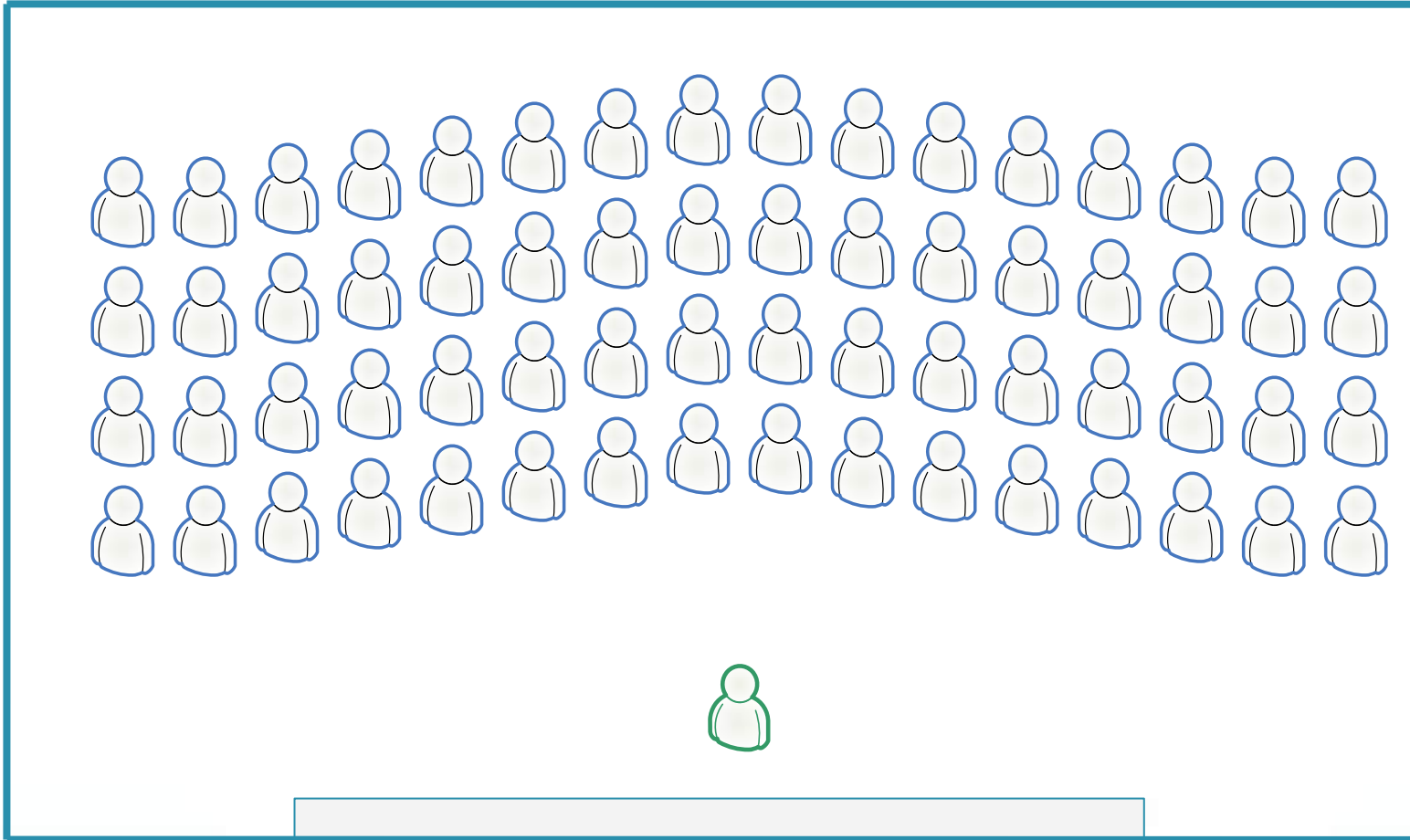
- **Typical answers:**

- Faster delivery
- Higher quality
- Increased motivation and work pride
- Clearer roles

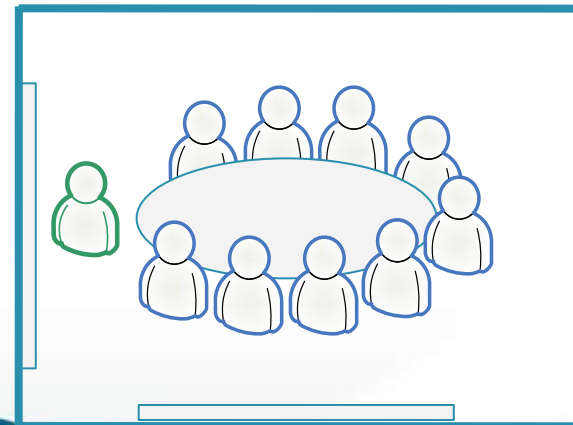
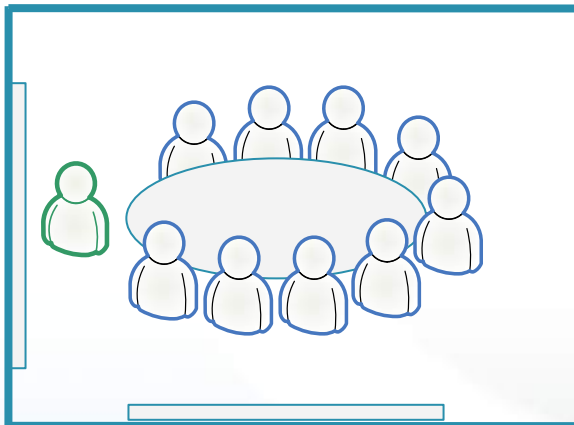
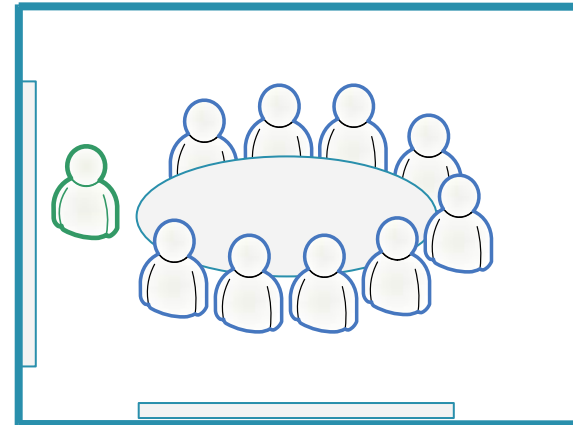
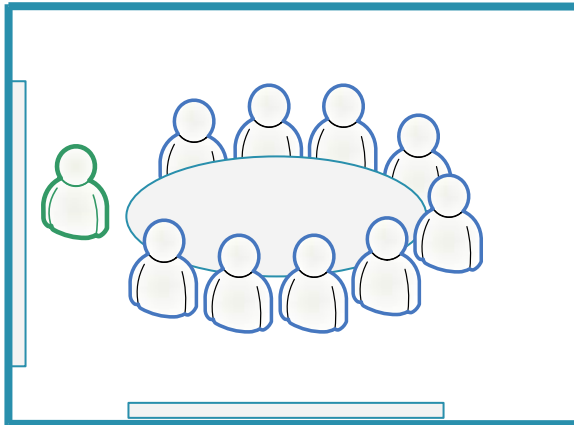
Step 3: Interviews



Step 4: Half-day Agile intro



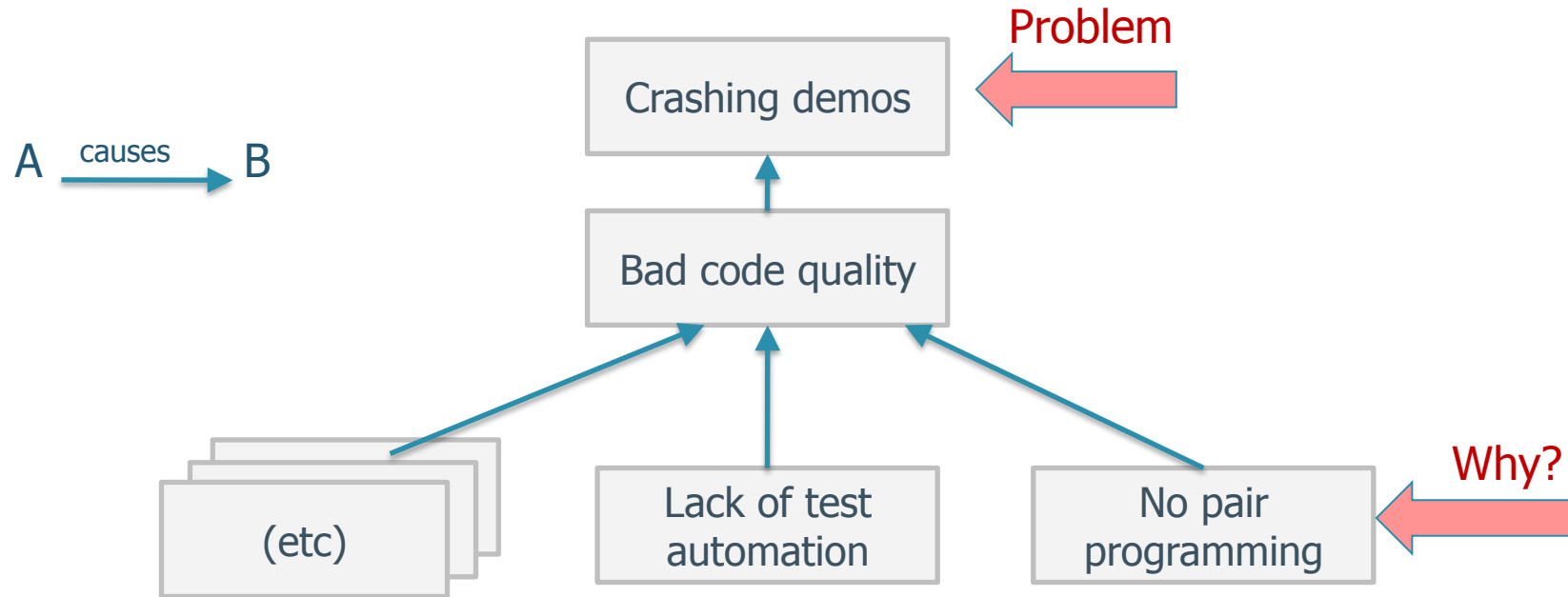
Step 5: Half-day workshops



Technique: Cause-effect diagrams

71

What is the problem?



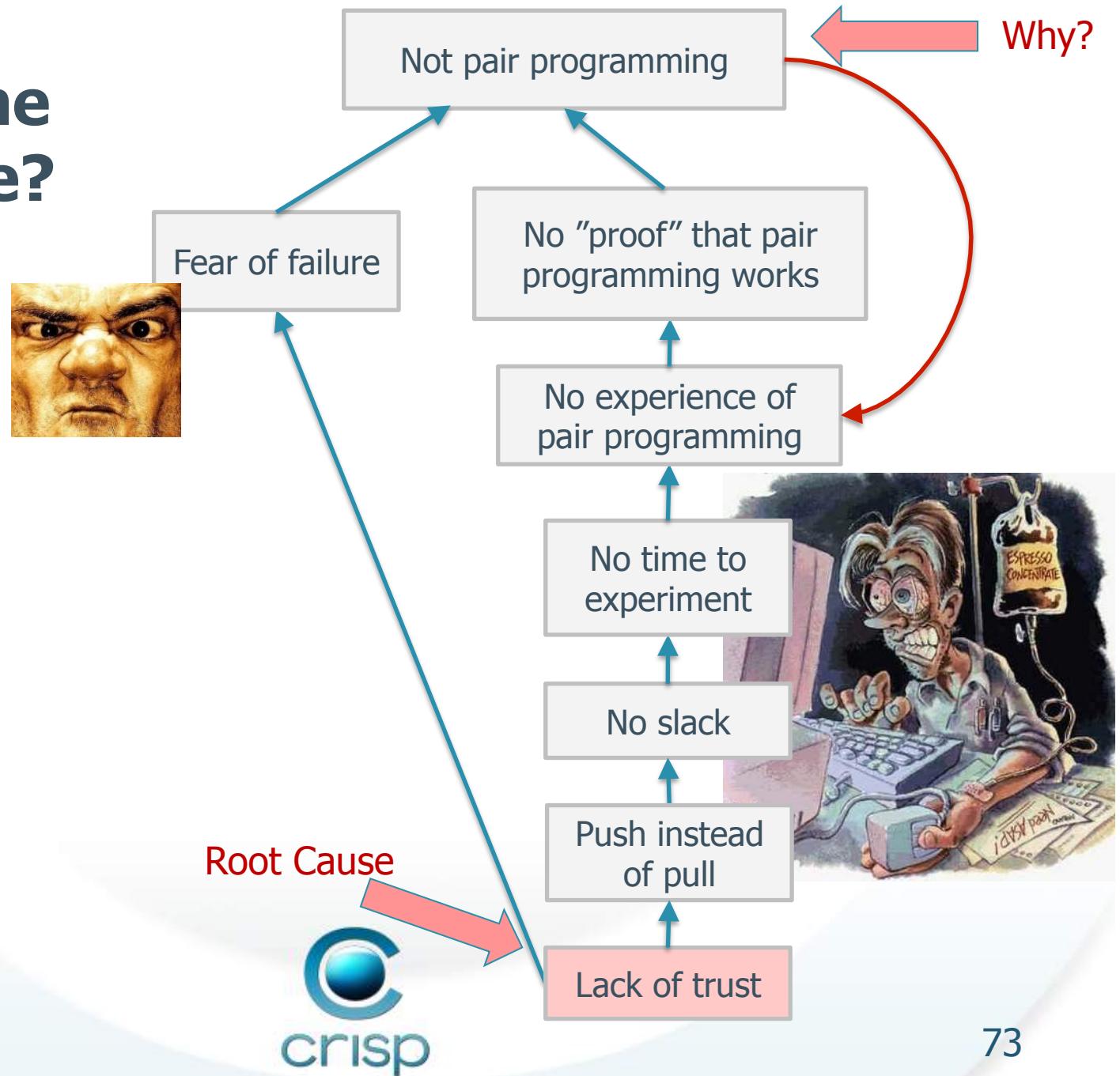
Henrik Kniberg

Our problem is that we're failing to do XP practices like TDD and pair programming.

Really?



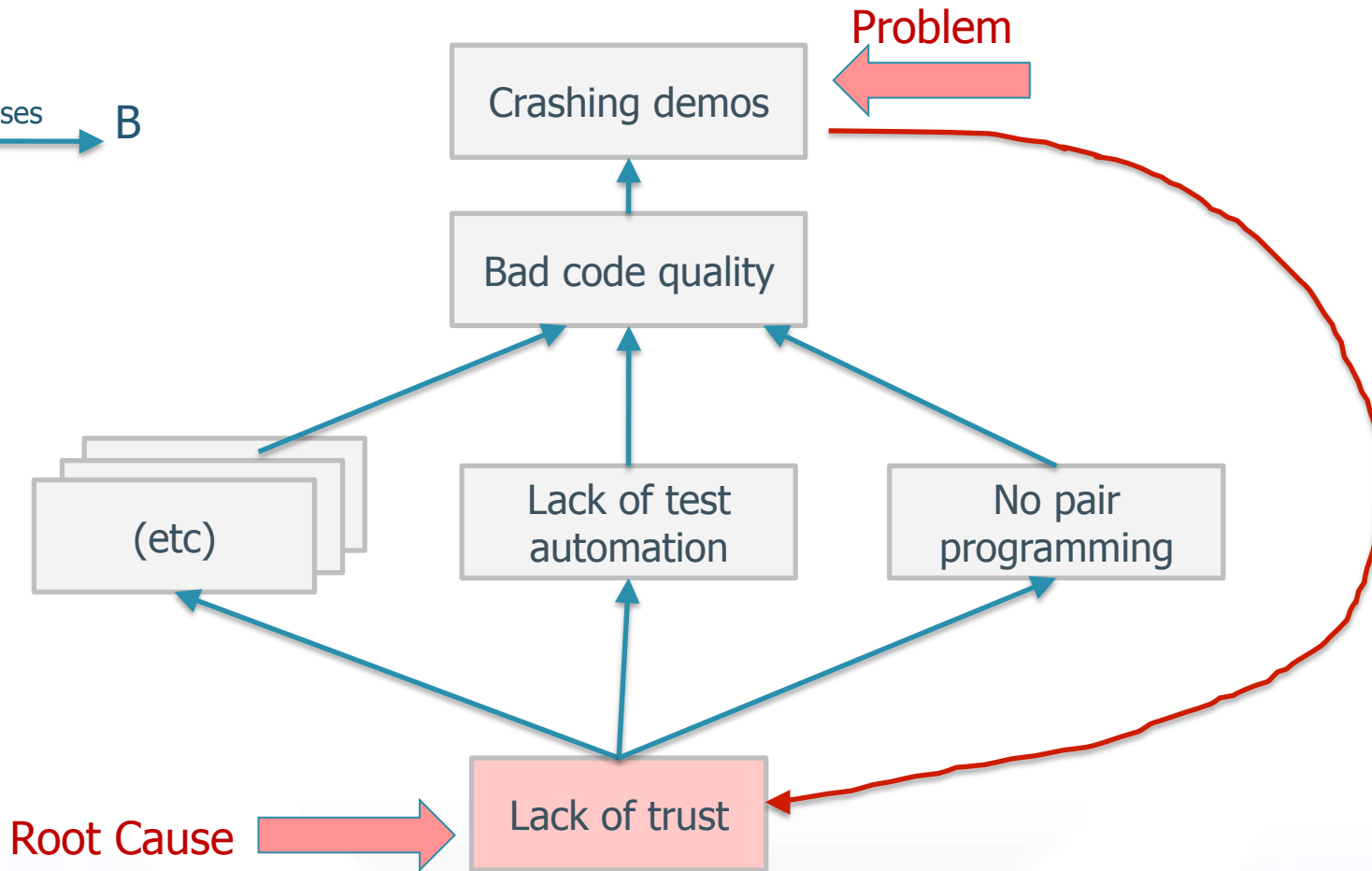
What is the root cause?



Spot the loop



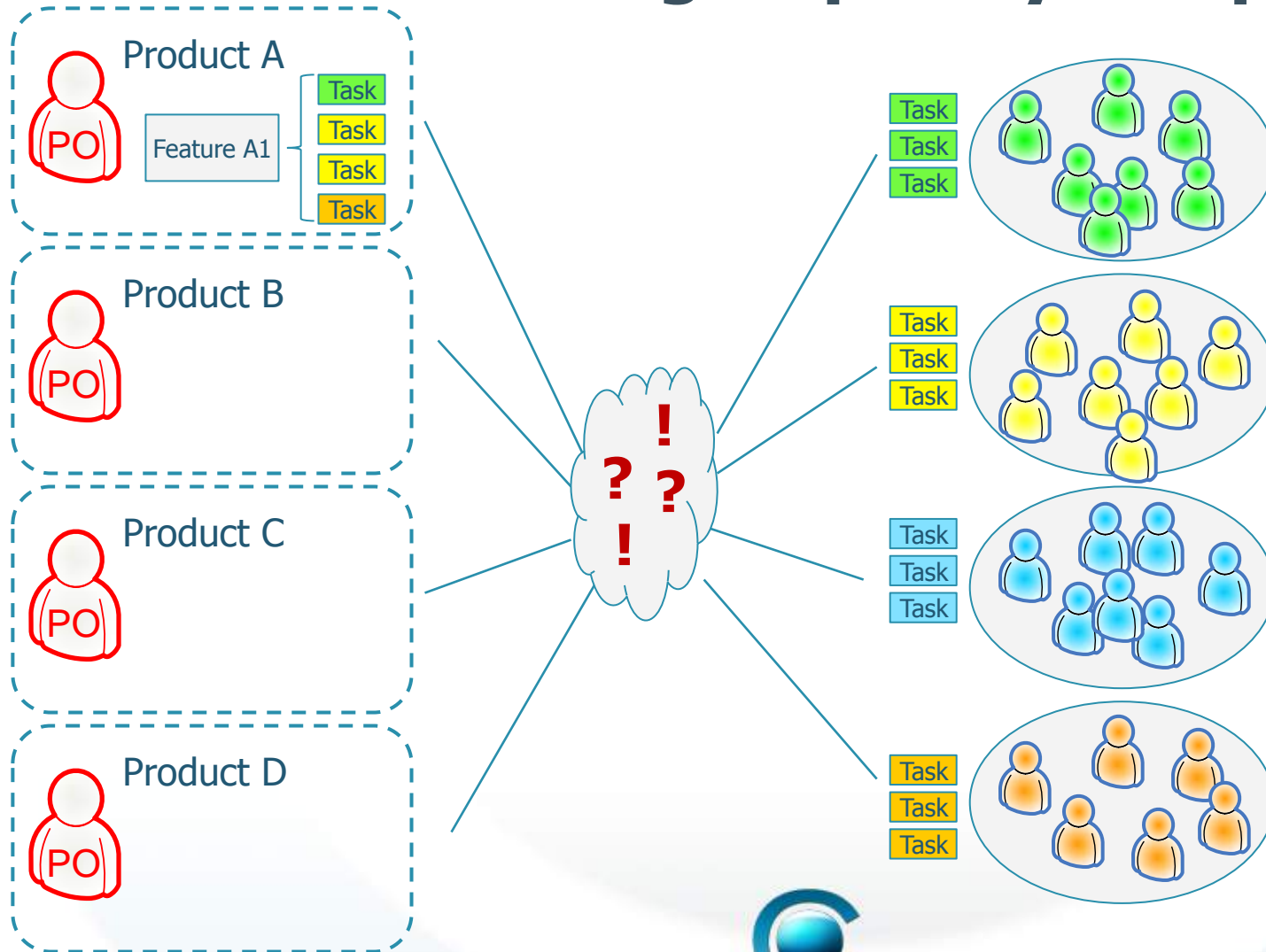
A causes B



**Example:
self-
reorganization**

75

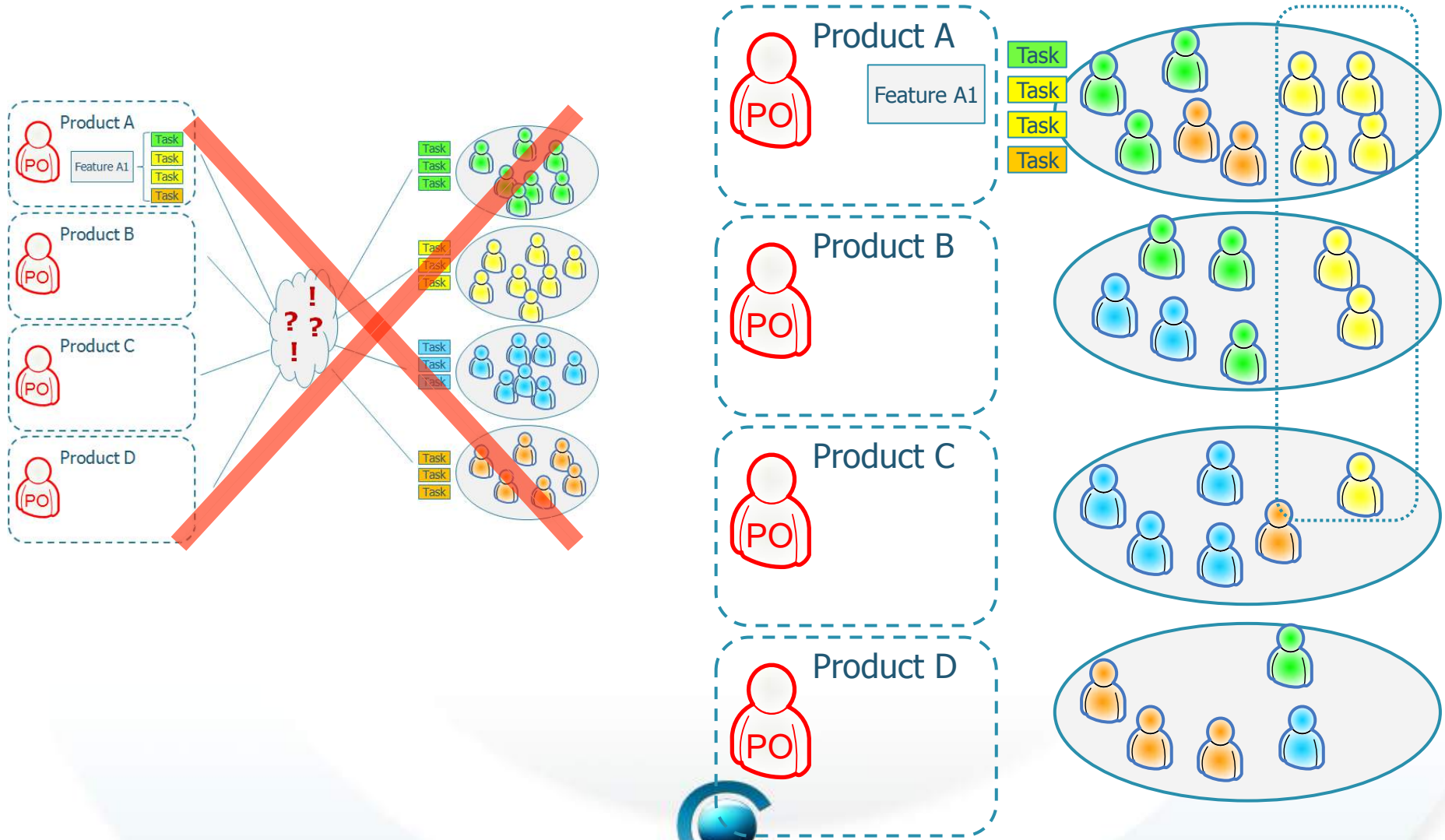
Problem: Teams grouped by component



Henrik Kniberg



Goal: Feature teams



Self-organizing to form new teams

Preliminary team allocation



Combined

After a week in the kitchen



New

Combined

Wrapup

79

Your change

- What is your next step?
- How will you know if you are moving in the right direction?



Every week I expect to spend less time on email, and check email less frequently. So I measure both of these.

Next step	In progress	Done
Identify categories of email that I can delegate/ outsource	Check inbox max 2 times per day	Delegate all new client requests to my colleagues Strictly apply the GTD 2-minute rule

- **Change starts with You**
- **Don't change other people, motivate them to change themselves**
 - Give them a reason to change (visualization)
 - Show them a way to change. (Small, clear steps)
 - Give them support, encouragement, and feedback

CURRENT SITUATION

Where are we right now?



NEXT STEP

What is the next step towards this destination?



PROGRESS METER

How will we know if we are moving in the right direction?

DESTINATION

What is the destination?

MOTIVATION

Why do we want to go there?

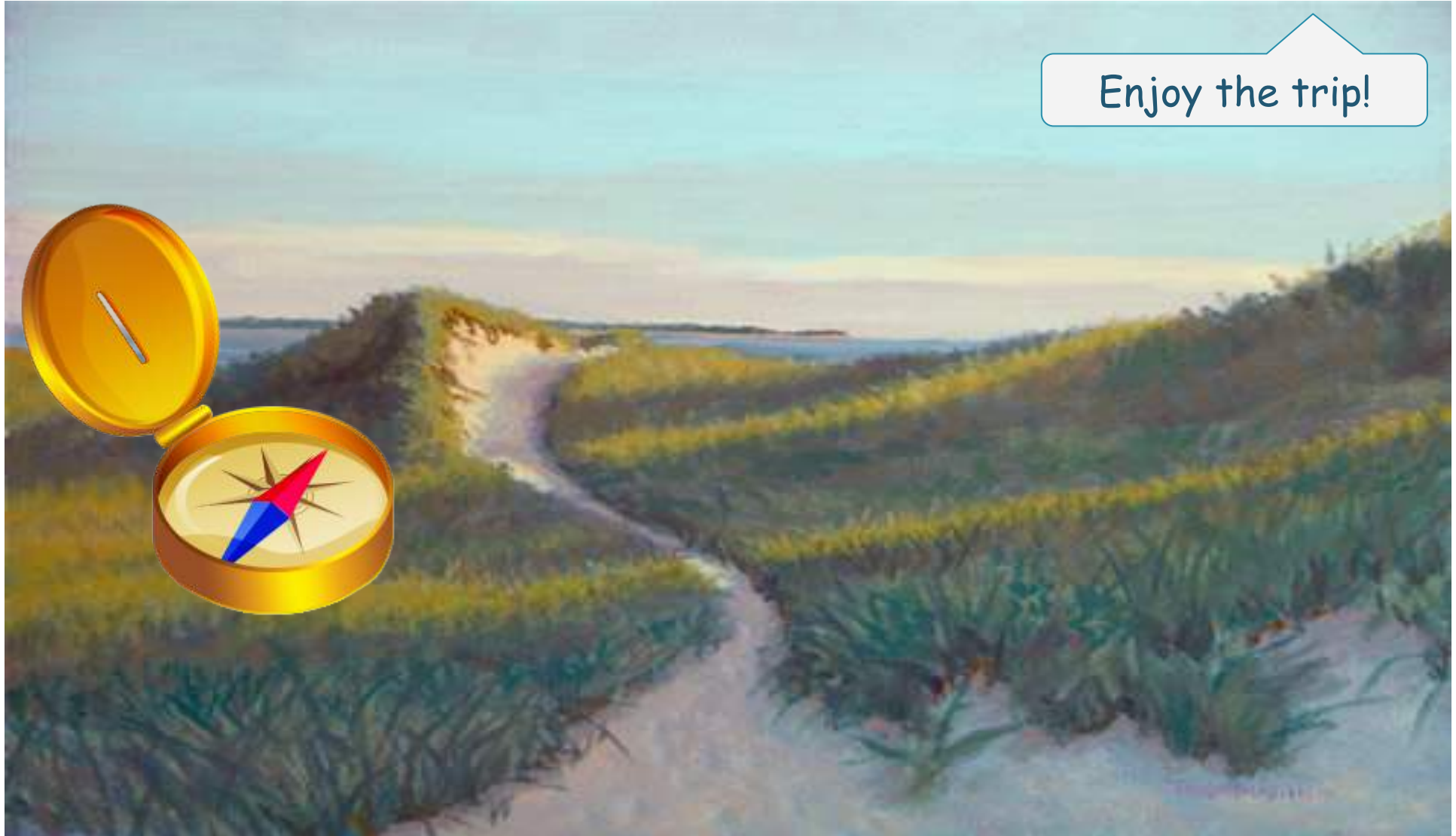


**Perfection is a direction,
not a place!**

Perfection is a direction, not a place



Enjoy the trip!



Henrik Kniberg

crisp

82