


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

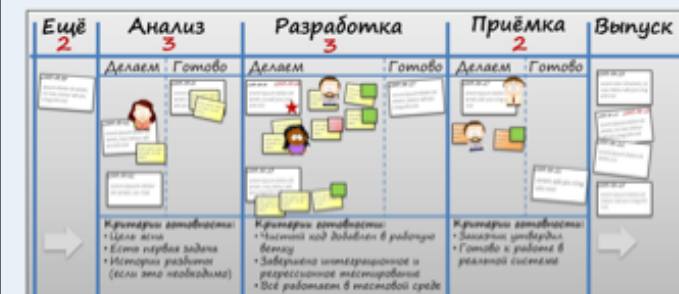
InfoQ Enterprise Software Development Series

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SCRUM И KANBAN: ВЫЖИМАЕМ МАКСИМУМ

ХЕНРИК КНИБЕРГ И МАТТИАС СКАРИН

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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

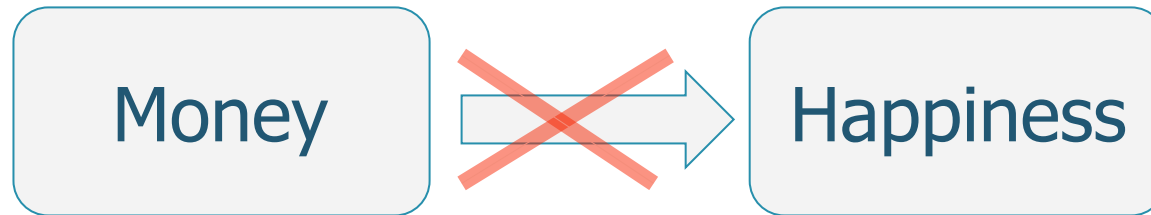
?

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

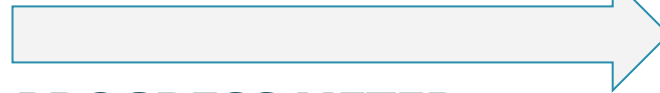
CURRENT LOCATION

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.

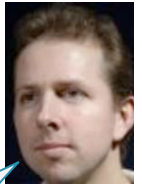
Работающий продукт — основной показатель прогресса.

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**

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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

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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

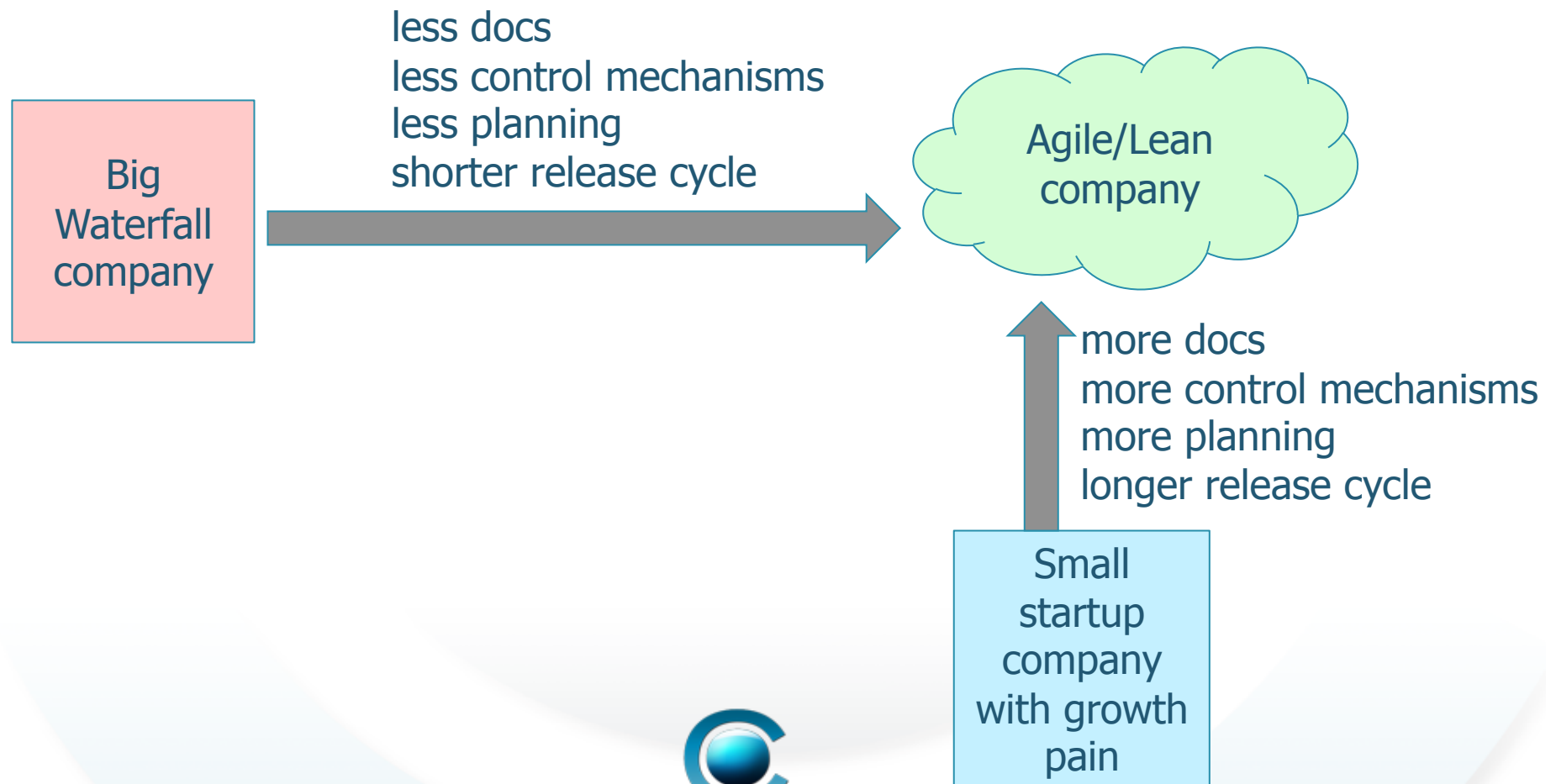
Doesn't understand the destination

MOTIVE

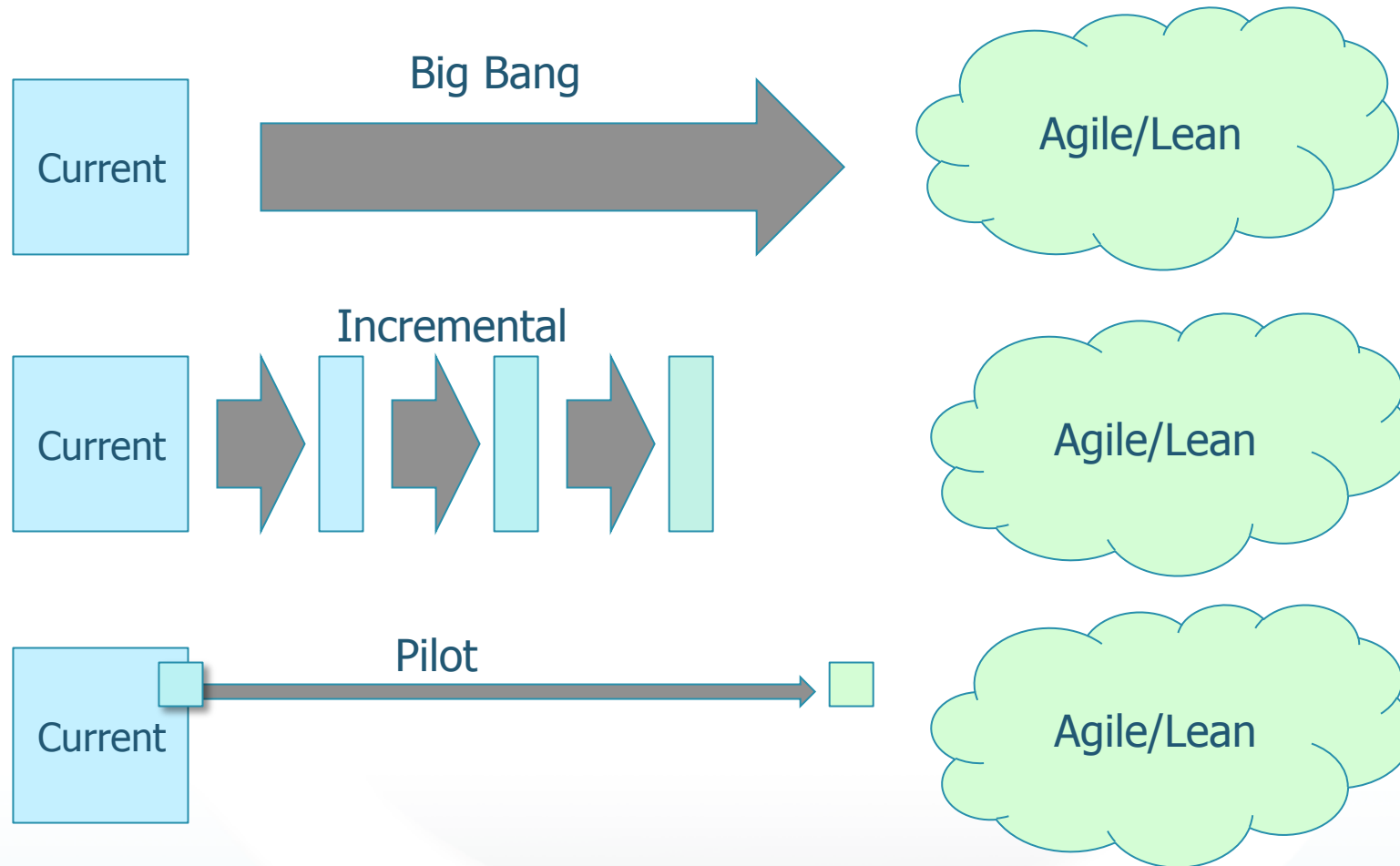
Doesn't want to go there



The path differs depending on where you come from



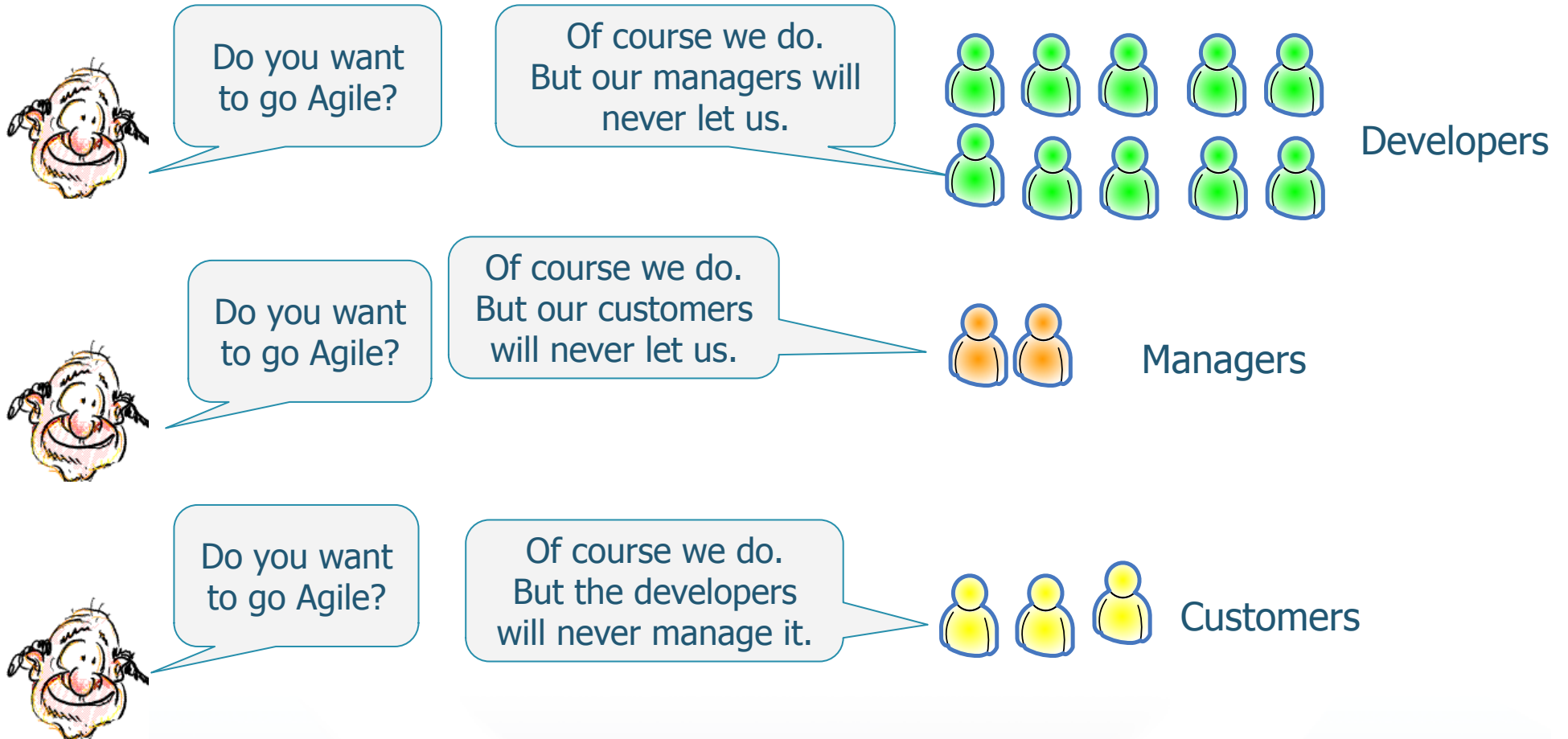
Choose the length & width of your path



**Strategy:
Avoiding the
“Not Invented
Here”
syndrome**

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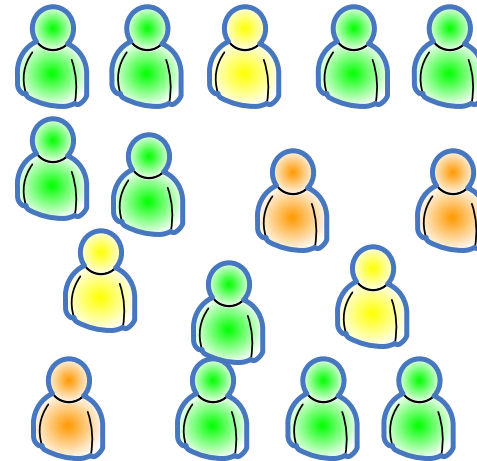
Not Invented Here syndrome



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!



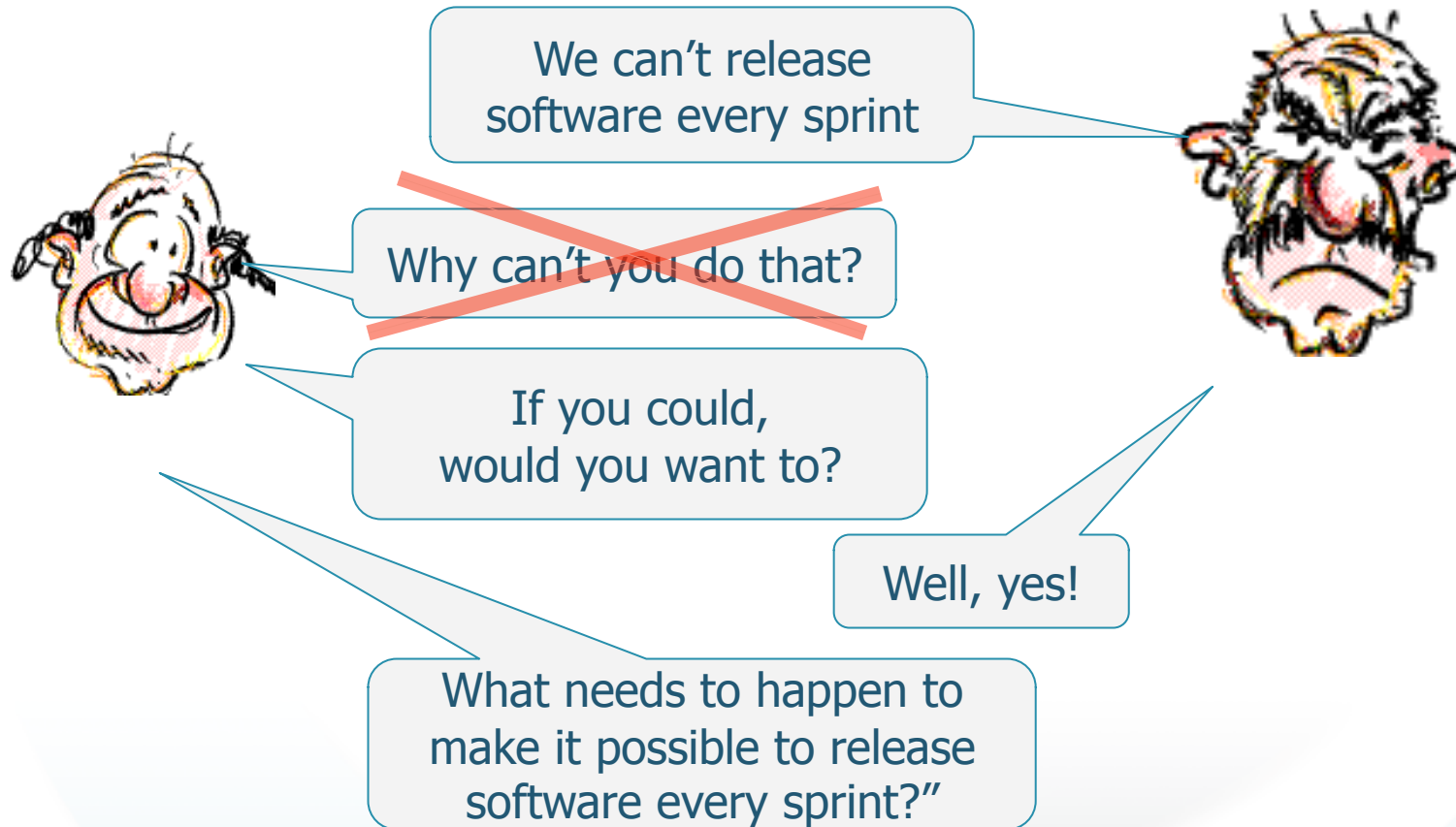
So what do you think?
Are you interested in moving in this direction?
Never mind How for the moment.

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**



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**Strategy: Make
the current
situation
painfully visible**

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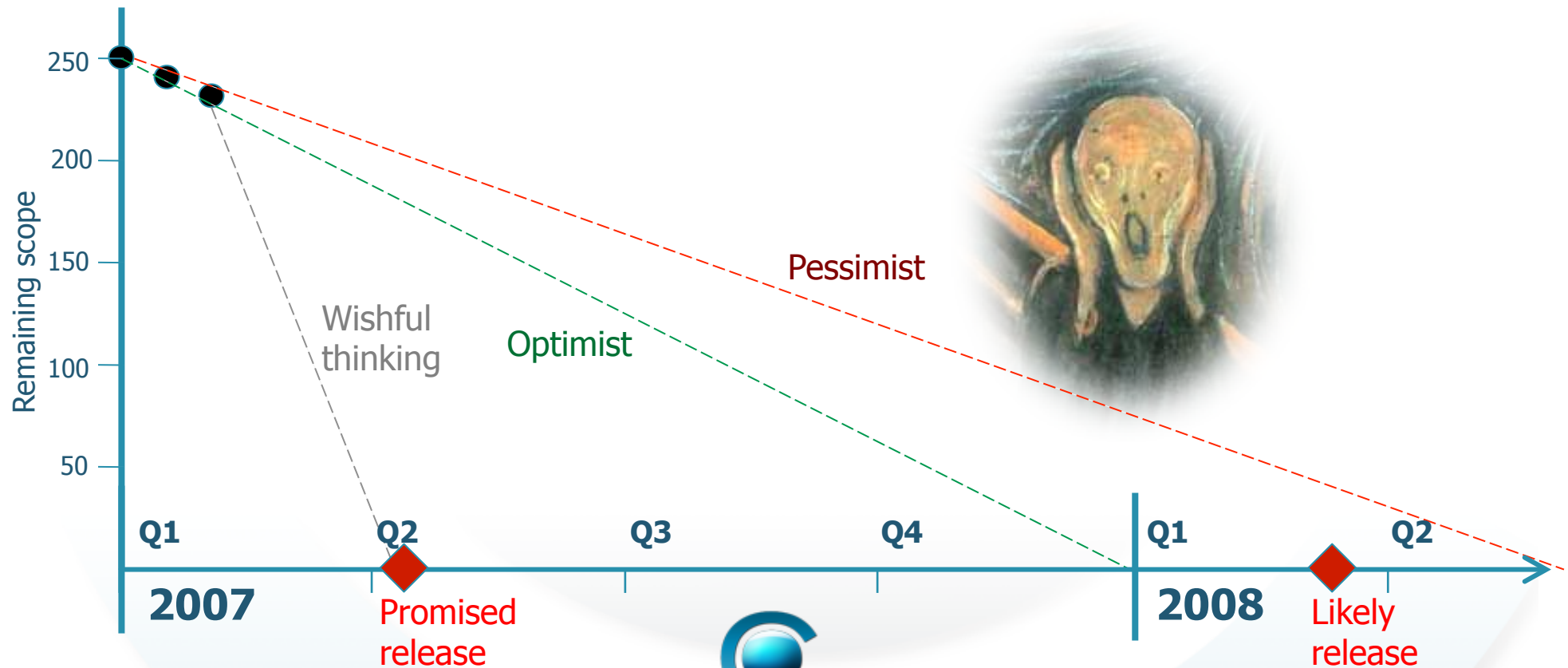
During the last few years, a new understanding of the process of organizational change has emerged. It is **not top-down or bottom-up**, but **participative at all levels**, aligned through a **common understanding of a system**.

Peter Senge
Author of "The fifth discipline"



Example: Late project

Backlog = 250 points
Velocity = 10 points/sprint \rightarrow 25 sprints \rightarrow > 1 year until release!



Death March

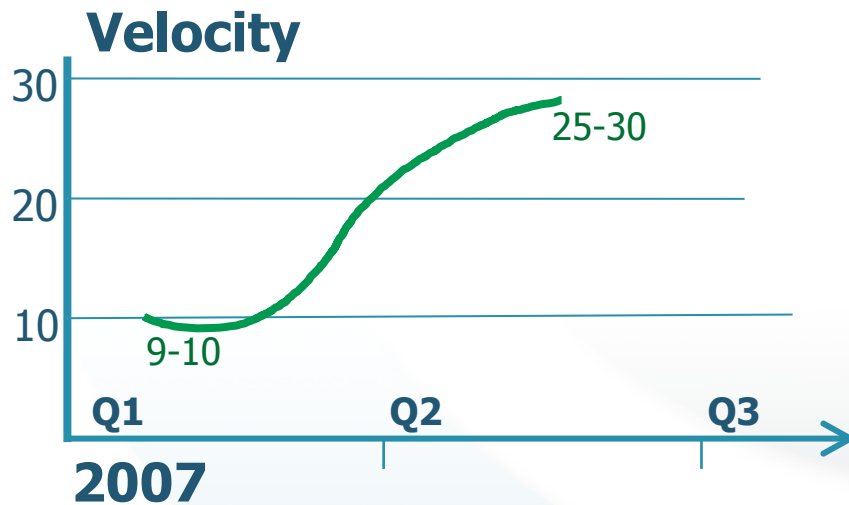
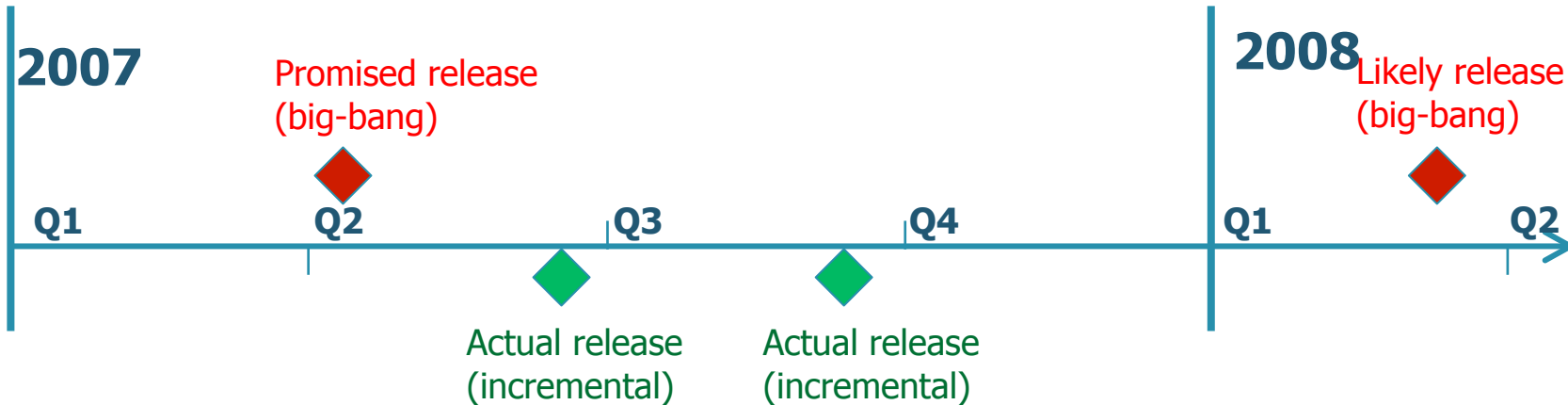


Backlog = 250 points

Velocity = 10 points/sp

Reduce by
cutting scope

Increase by
removing
impediments



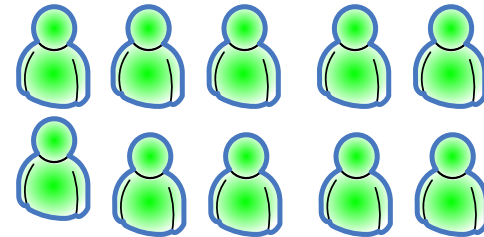
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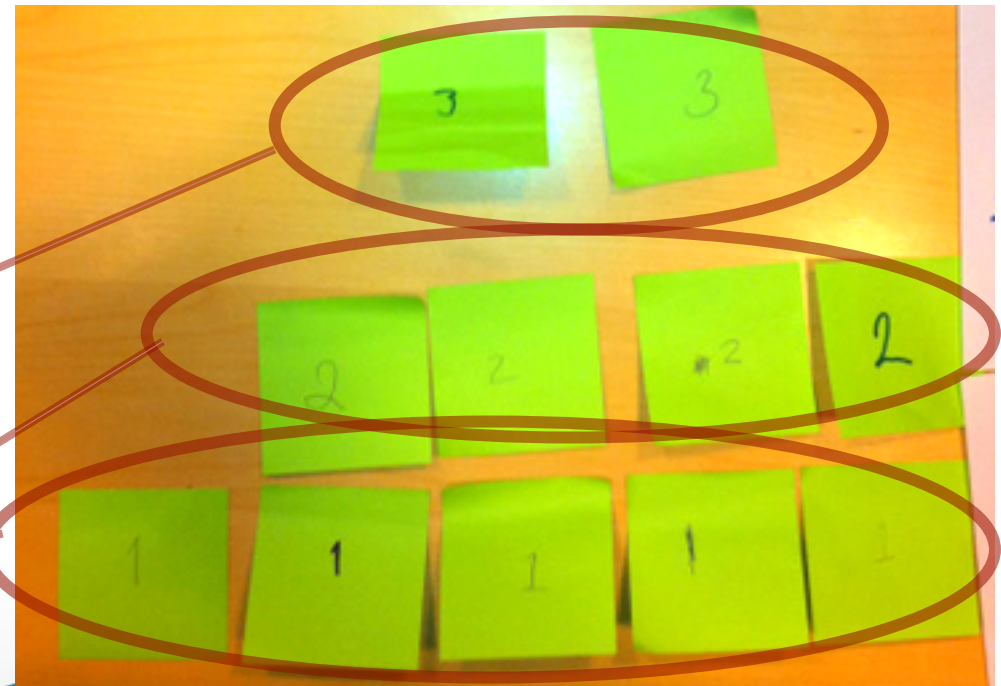
Sometimes subjective data is enough to detect a death march



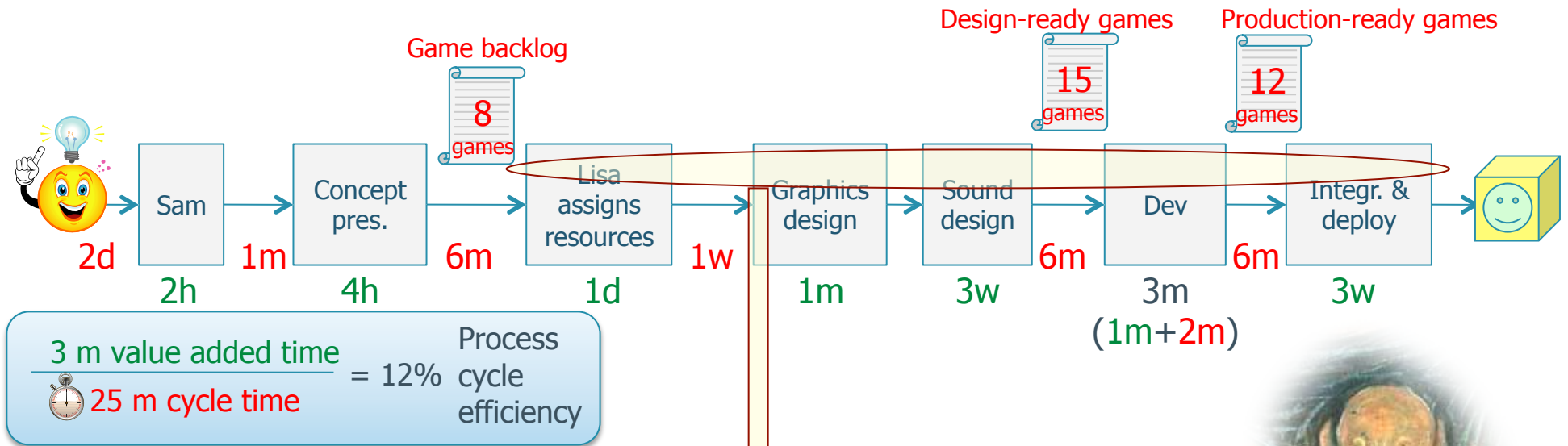
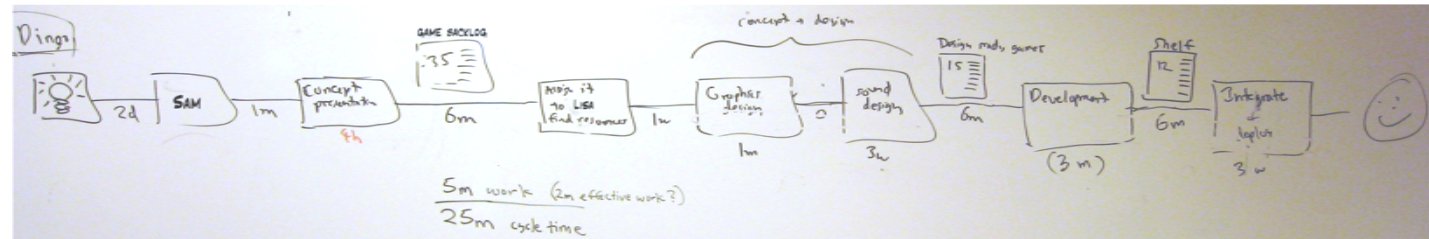
Do you believe the current goal is achievable?



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



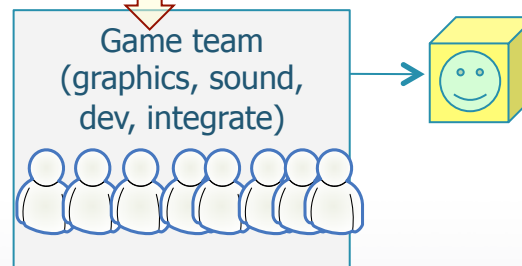
Before



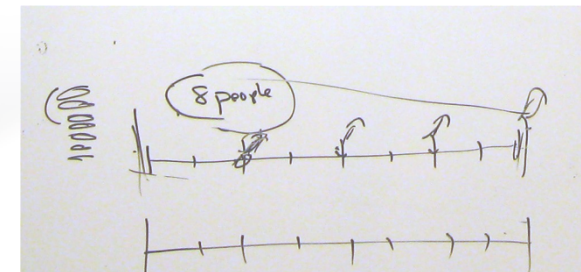
After

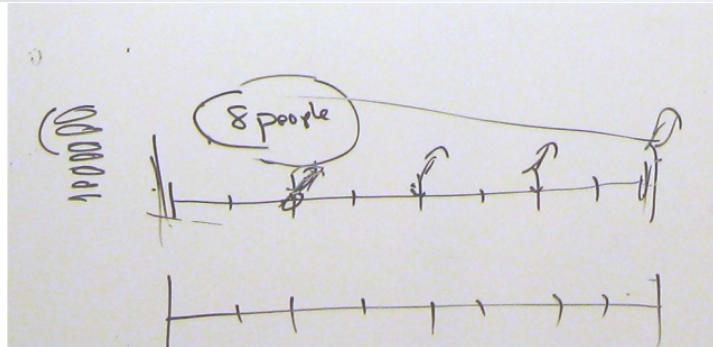
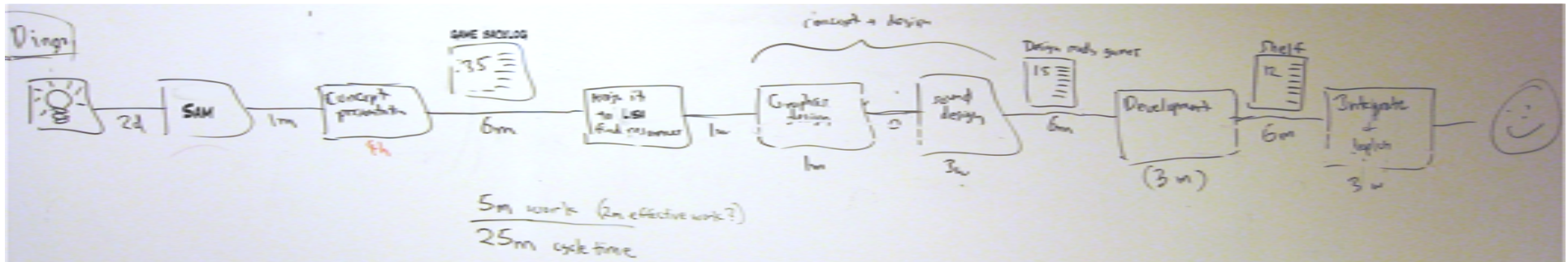
Cross-functional game team

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



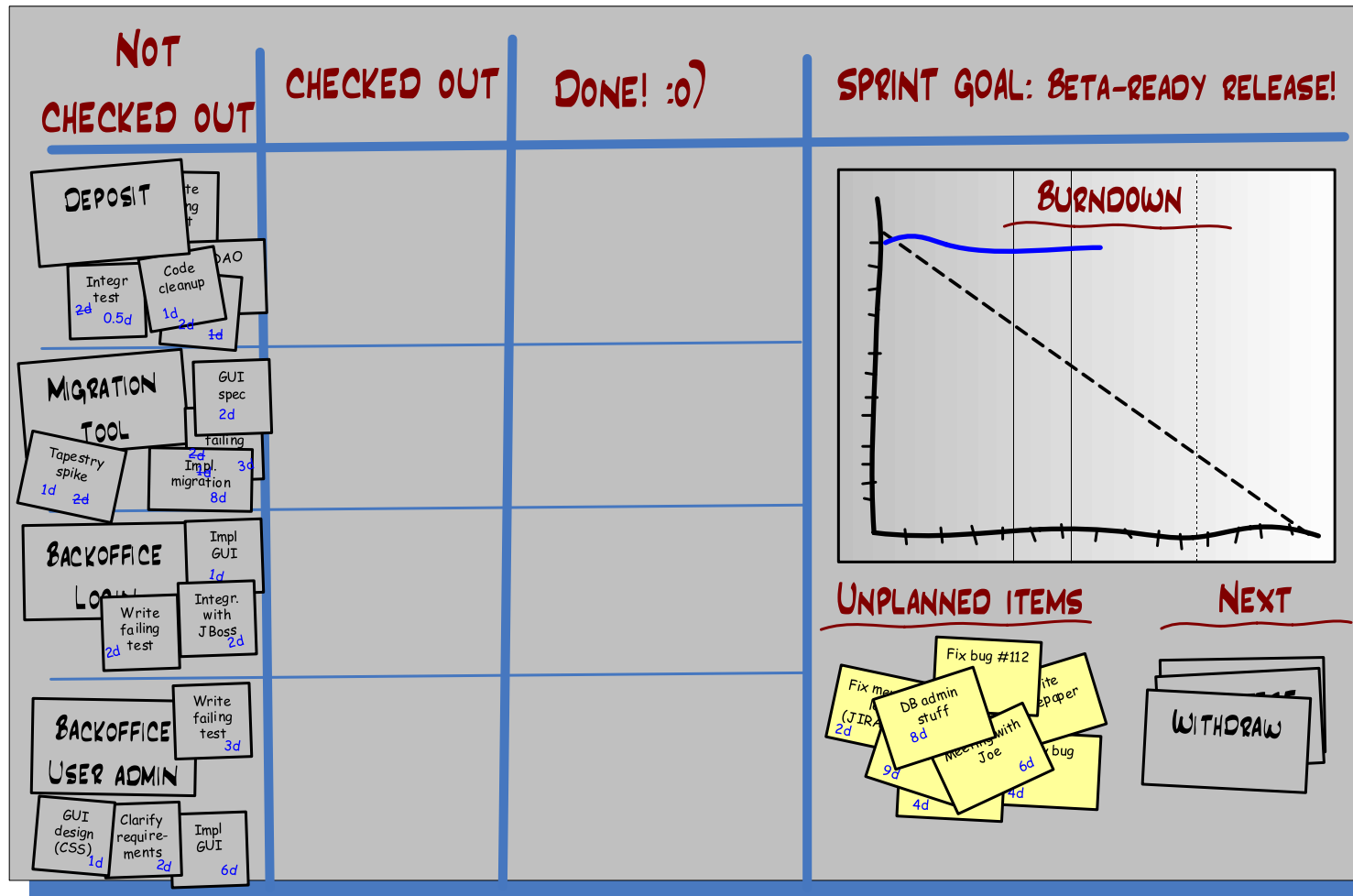
Estimated vs actual velocity

Estima ted	Actu al
40	30
40	30
40	30

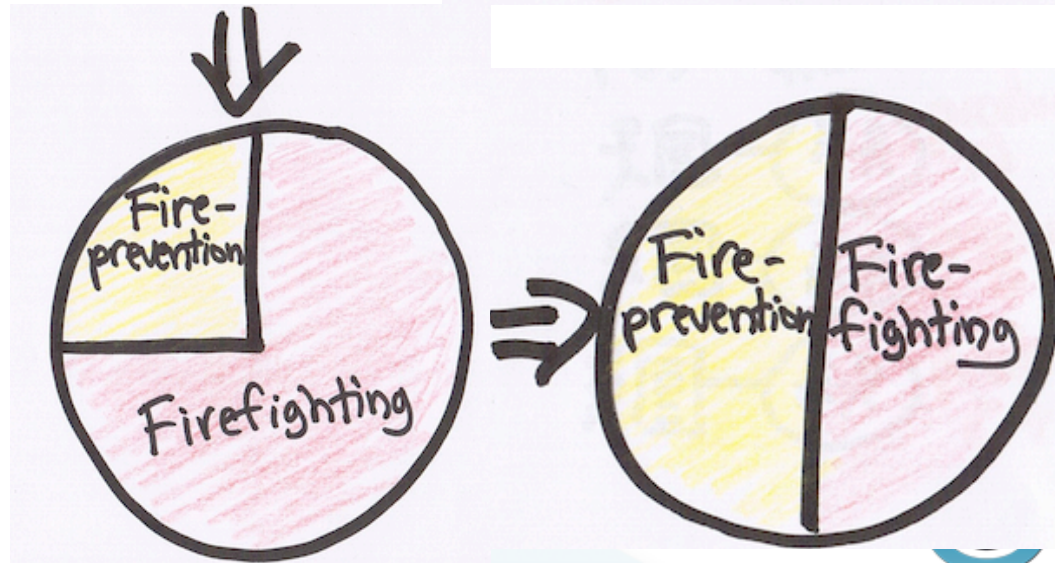
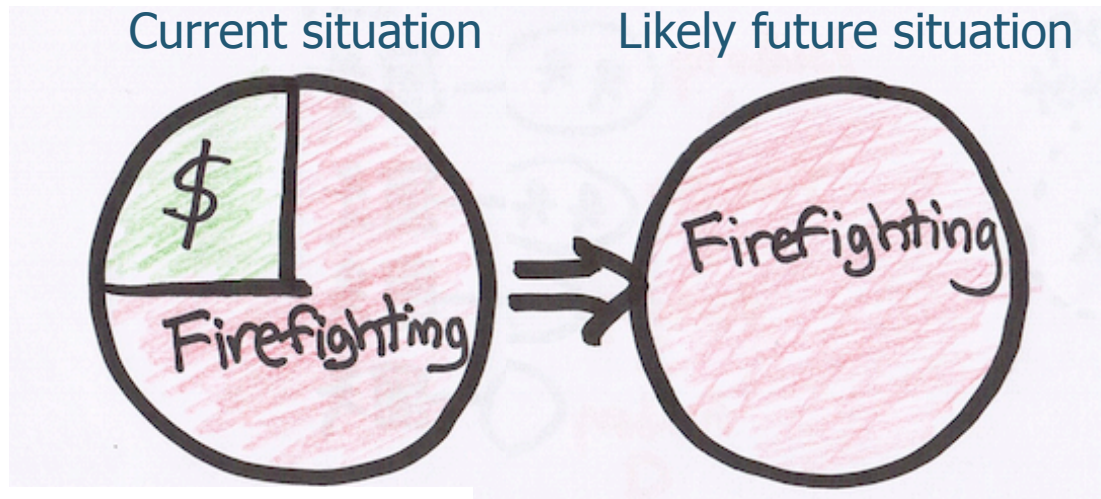
Estima ted	Actu al
40	30
50	30
60	30



Dead Sprint Detection



How do we spend our time?



Henrik Kniberg

crisp

Compare options (including the No Change option)

No way!
Too painful!

No way!
Too difficult!

No, I don't want to
try kanban



OK, let's try
kanban.

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

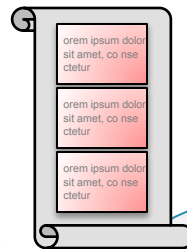
Increasing
technical debt

Slow computers

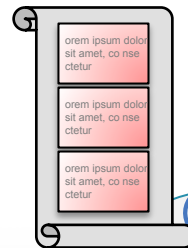
Manager



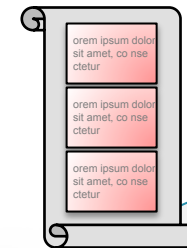
Top 3
impediments

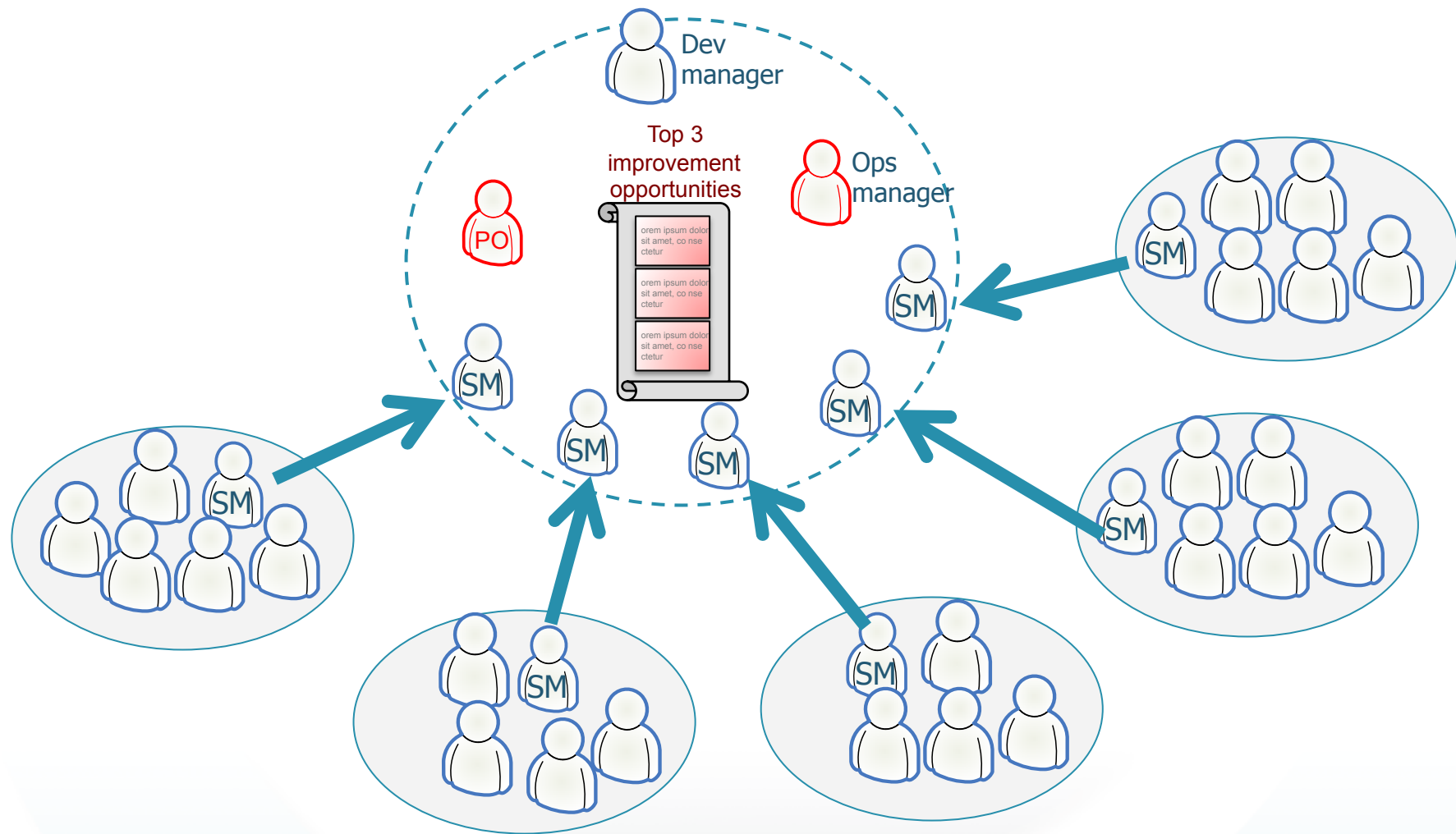


Top 3
impediments



Top 3
impediments





Happiness Index

Lack of
motivation

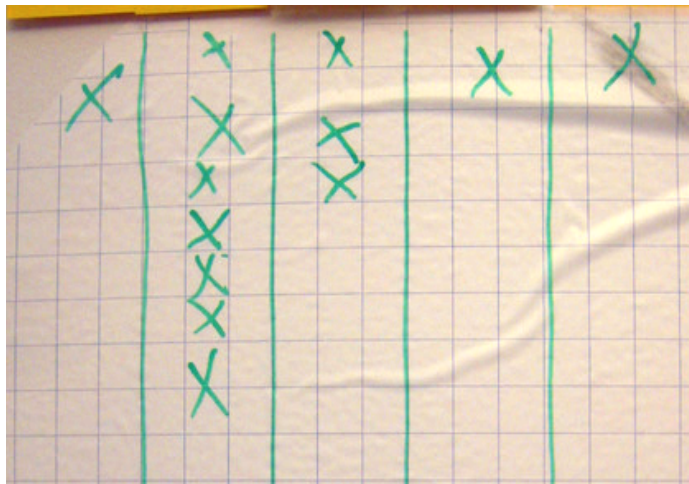
.....

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

1 2 3 4 5

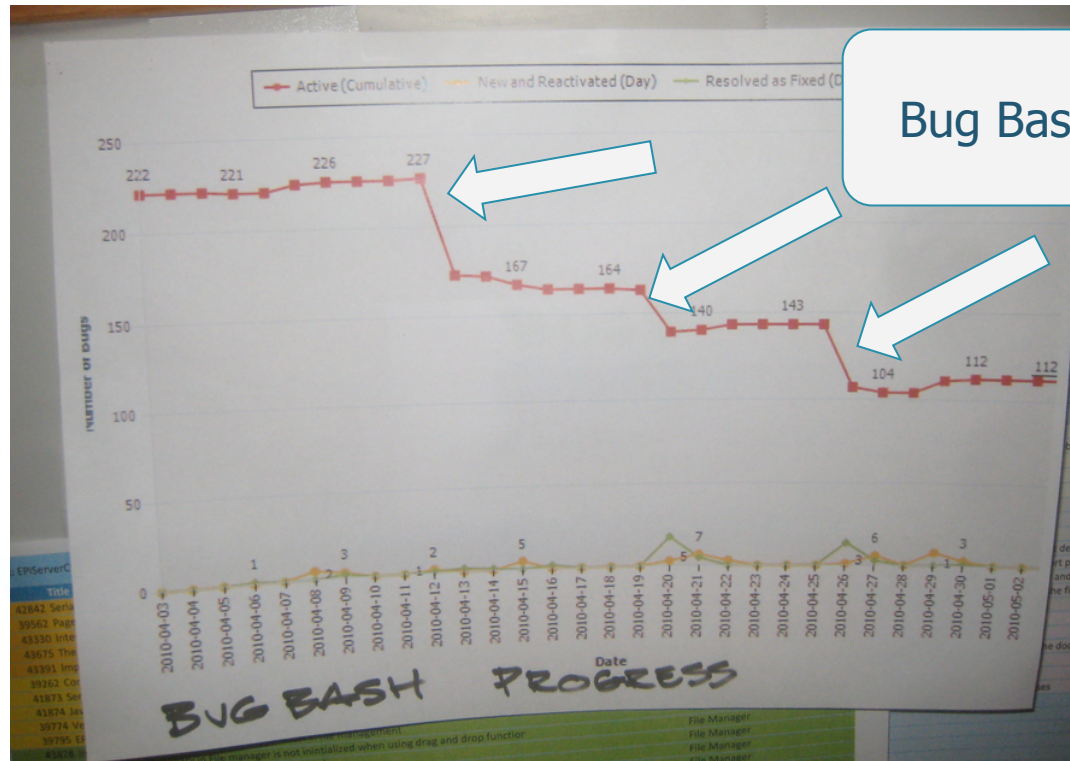


Product owner
moves closer
to developers

Managers &
developers talk about
motivation

.....

Reorganization in
management team



Bug Bash tuesdays

.....

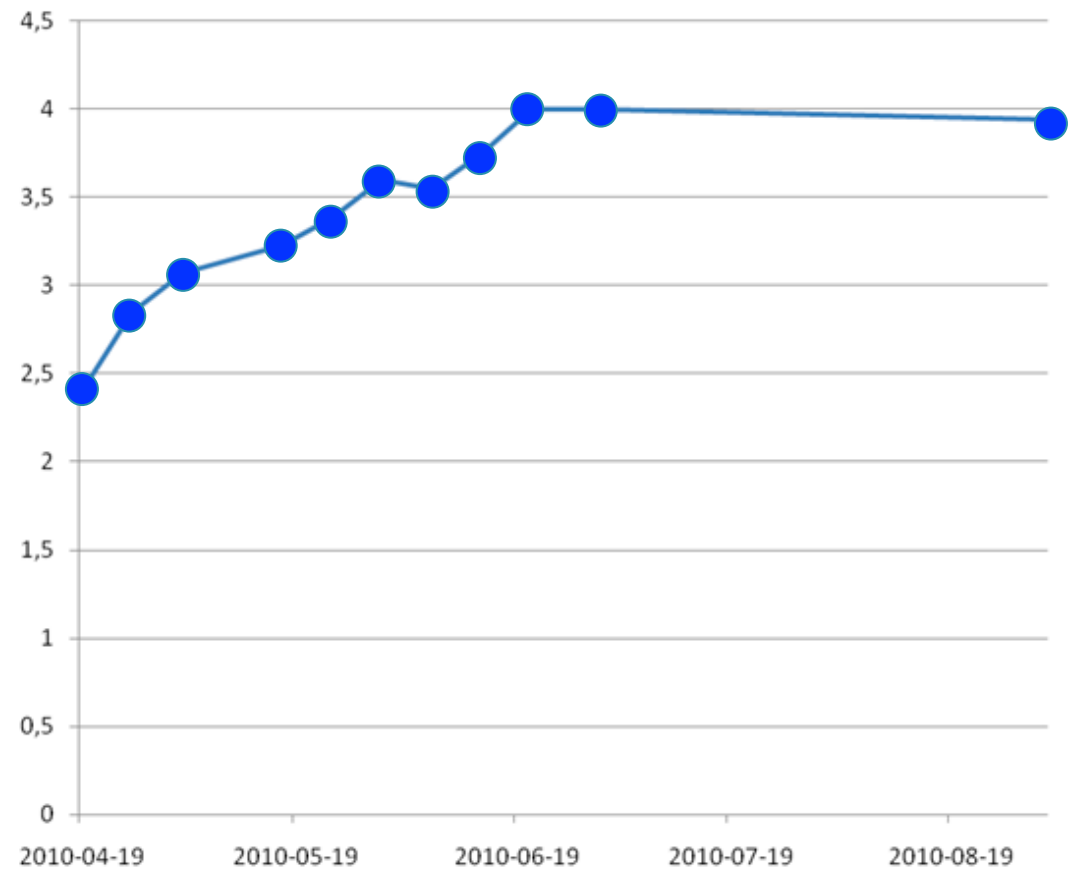
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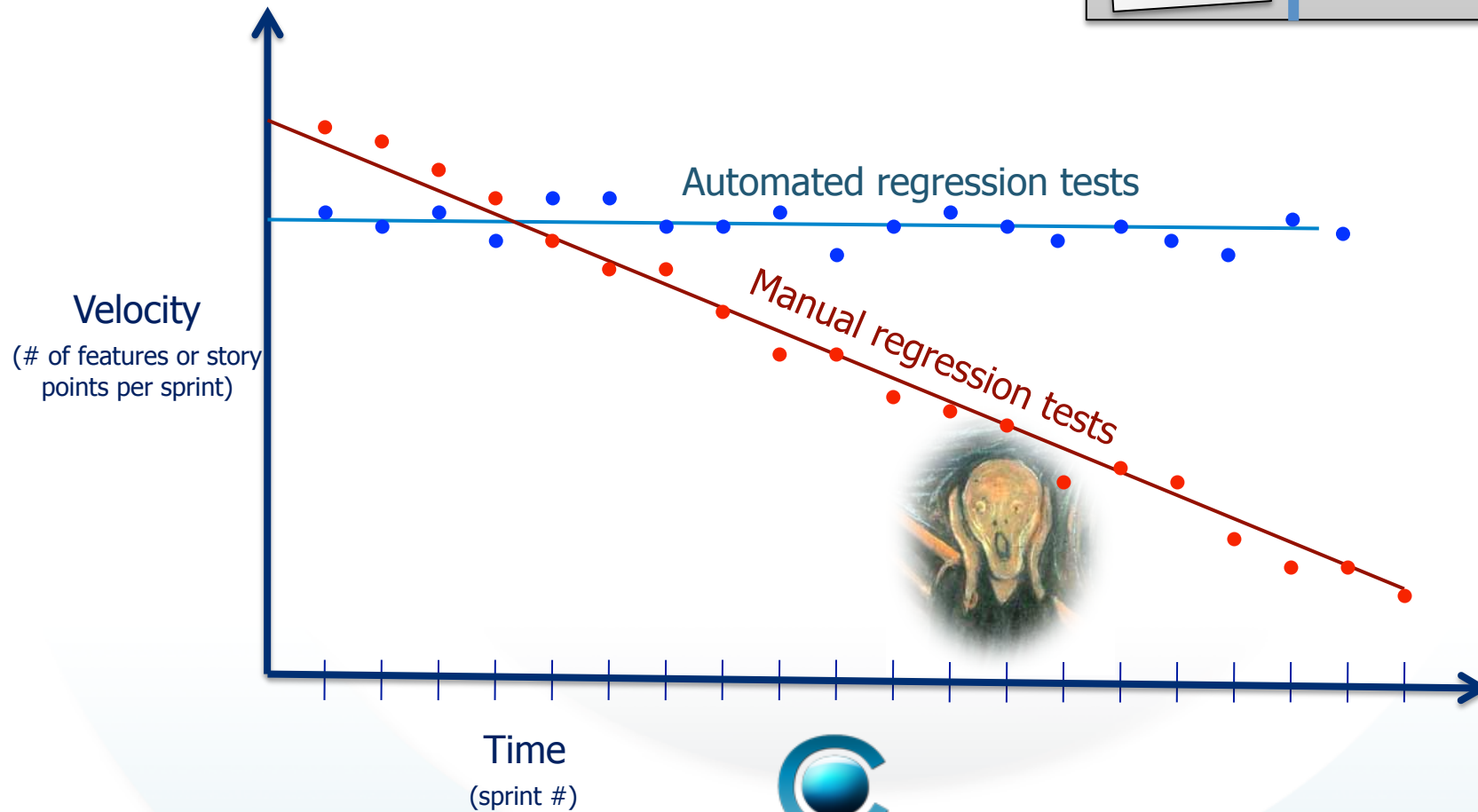
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Result

Happiness Index



To do	Doing	Done
Transfer	Withdraw	Register Deposit



**Strategy:
Small, clear
steps**

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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

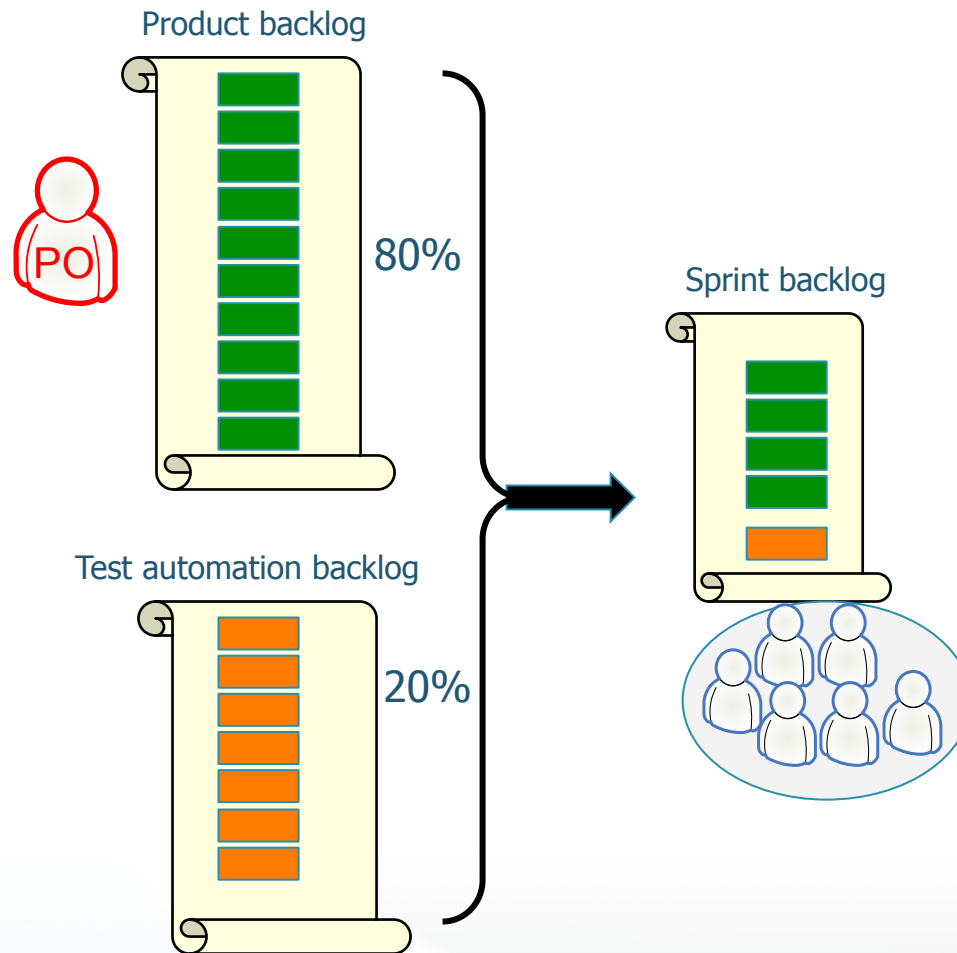
Step 3: Sort the list

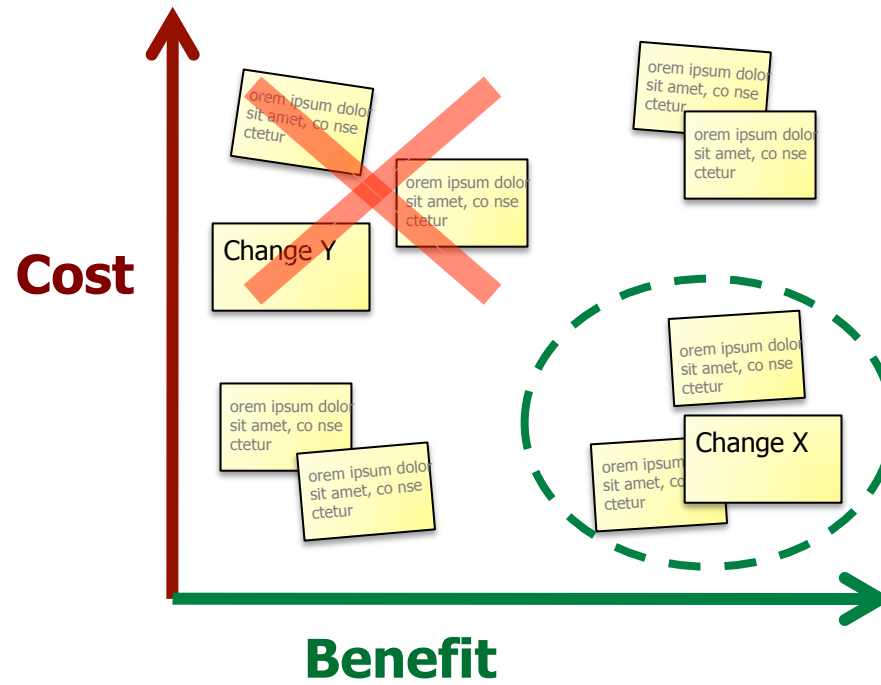
Automate first!

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

Automate last (or never)!

Step 4: Allocate capacity



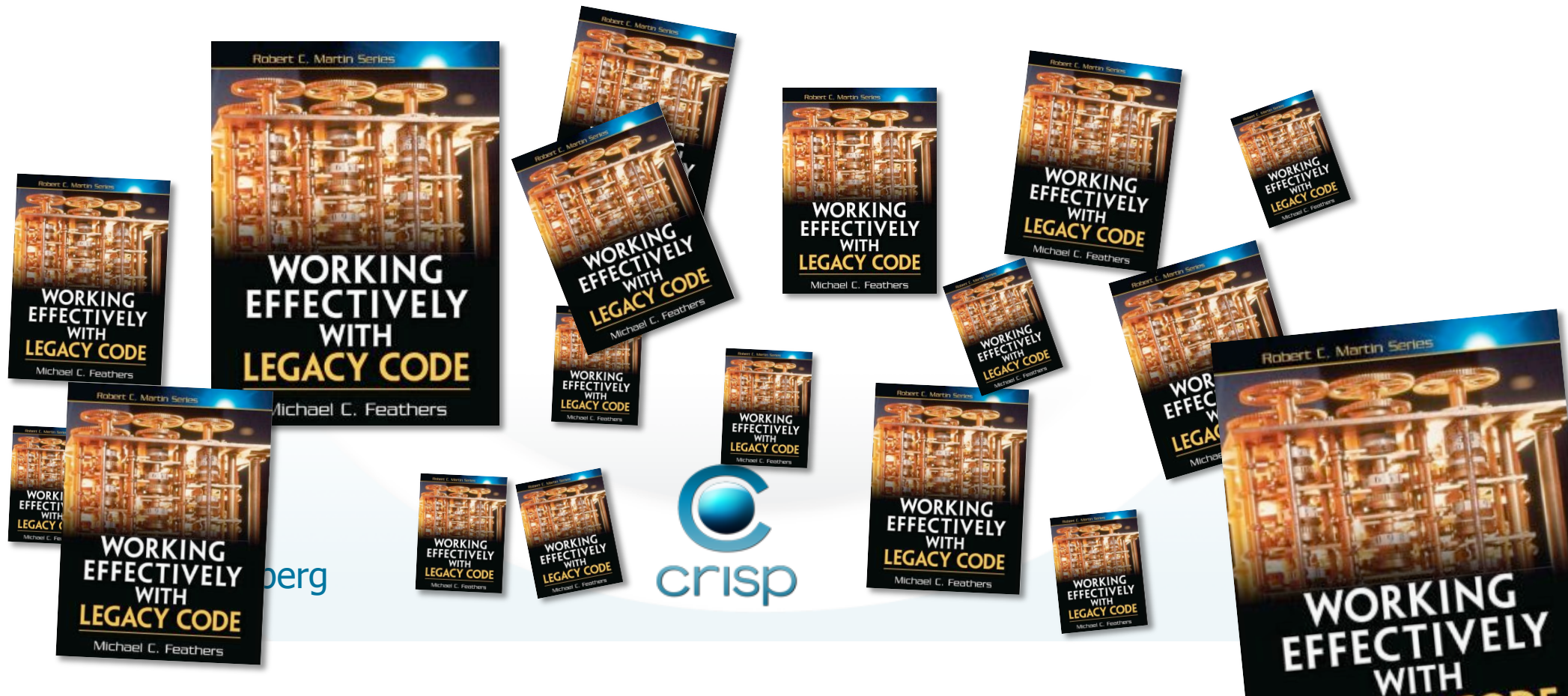


**Strategy:
External
"expert"
validation**

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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

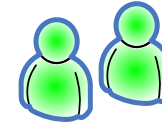
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How about if we
install a CI server?

Nah, don't
have time.

Don't think we
have a place to
install it



A few days later...

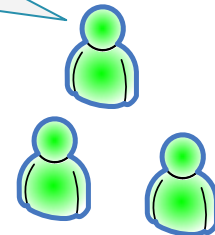


Um, Joe, you just
broke the build.
Again.

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

I got a CI server
running on my
machine

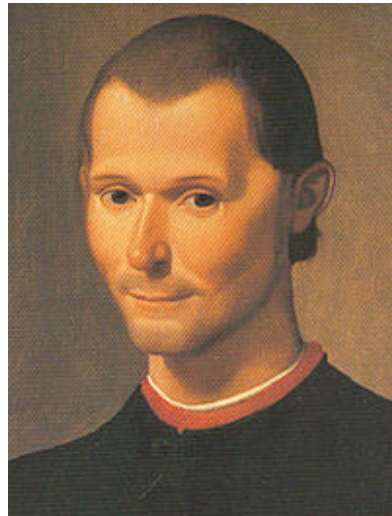
Cool!
Can you make it test my
branch too?



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

Strategy: Reversible “experiments”

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

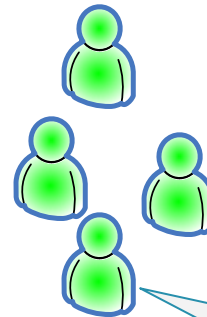
Niccolò Machiavelli





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

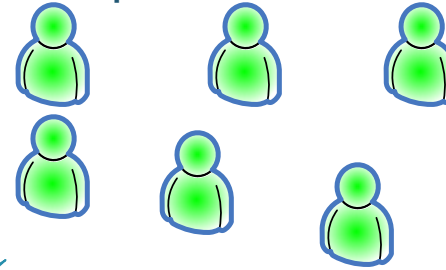


Are you willing to TRY sitting together for one sprint? We don't need to formally change the organization.

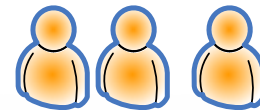
OK

OK

Developers



Testers



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

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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"**

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

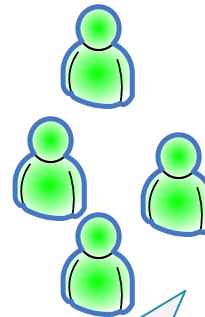
Well, actually, no they haven't.

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**

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

Configuration Audit Findings.doc

lkjdfjh sdfkjsdfkjh sdfkjh dfjkh kjhjdjggd fjh dfhg sdkjhdrg dfkj hdfjhgdfkjdhfjg dfkjh df kd dlk
dfk jdfklj lkjdjkhkkkjkd jddjckf fjk djh sdfkj sdfjh dfkj dfhj d dkjdckkd jd fjfjd hdjjs dfjhbsdfkjh
sdlkjviuhwjkb sd fksjd bcjsd h. dkf fjk djh sdfkj sdfjh dfkj dfhj d dkjdckkd jd fjfjd hdjjs
dfjhbsdfkjh sdlkjviuhwjkb sd fksjd bcjsd h.

lkjdfjh sdfkjsdfkjh sdfkjh dfjkh kjhjdjggd fjh dfhg sdkjhdrg dfkj hdfjhgdfkjdhfjg dfkjh df kd dlk
dfk jdfklj lkjdjkhkkkjkd jddjckf fjk djh sdfkj sdfjh dfkj dfhj d dkjdckkd jd fjfjd hdjjs dfjhbsdfkjh
sdlkjviuhwjkb sd fksjd bcjsd h. dkf fjk djh sdfkj sdfjh dfkj dfhj d dkjdckkd jd fjfjd hdjjs
dfjhbsdfkjh sdlkjviuhwjkb sd fksjd bcjsd h.

lkjdfjh sdfkjsdfkjh sdfkjh dfjkh kjhjdjggd fjh dfhg sdkjhdrg dfkj hdfjhgdfkjdhfjg dfkjh df kd dlk
dfk jdfklj lkjdjkhkkkjkd jddjckf fjk djh sdfkj sdfjh dfkj dfhj d dkjdckkd jd fjfjd hdjjs dfjhbsdfkjh
sdlkjviuhwjkb sd fksjd bcjsd h. dkf

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

lkjdfjh sdfkjsdfkjh sdfkjh dfjkh kjhjdjggd fjh dfhg sdkjhdrg dfkj hdfjhgdfkjdhfjg dfkjh df kd dlk
dfk jdfklj lkjdjkhkkkjkd jddjckf fjk djh sdfkj sdfjh dfkj dfhj d dkjdckkd jd fjfjd hdjjs dfjhbsdfkjh
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hdjjs dfjhbsdfkjh sd

sdfkjasdf
asdfkjasdfkj
dsfkjasdfkj

asdfkjasdfkjasdf as
sdfkjasdfkj asdf
asdfkjasdfkj asdfkj
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

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Step 1: Ask "Why change?"

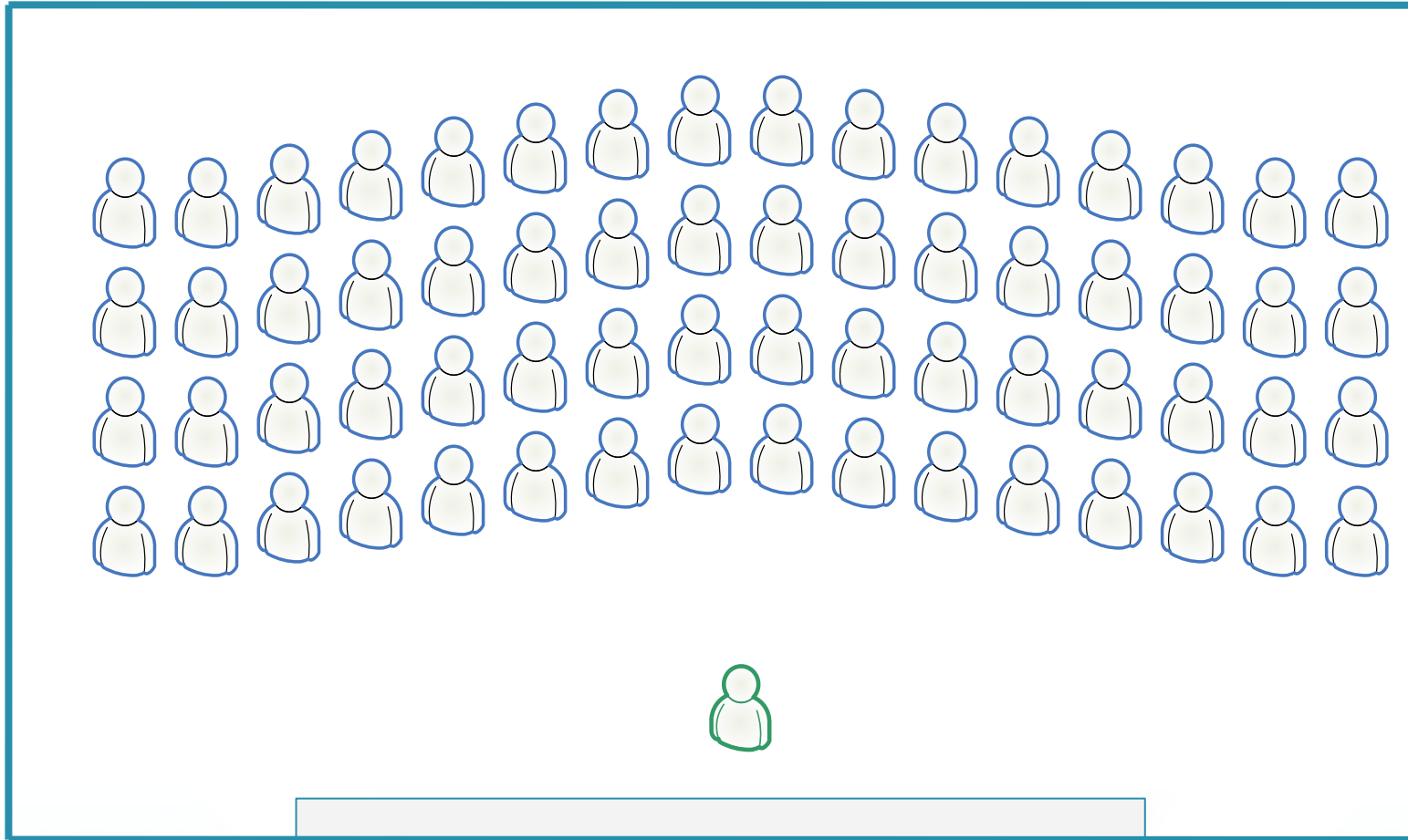
- **Typical answers:**

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

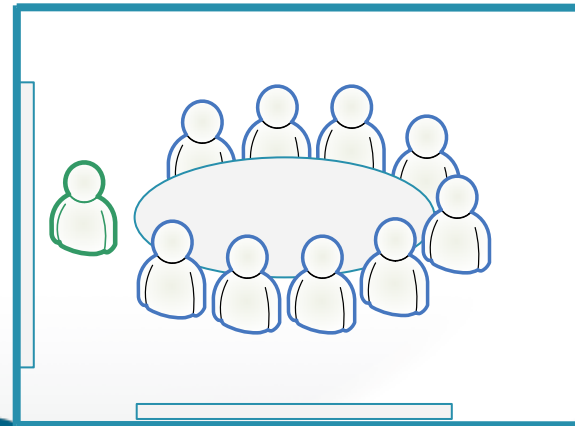
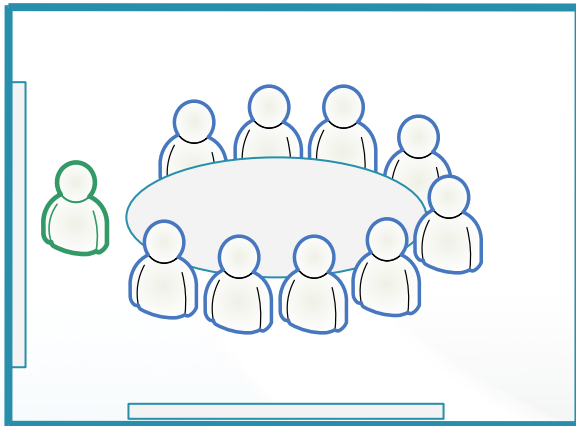
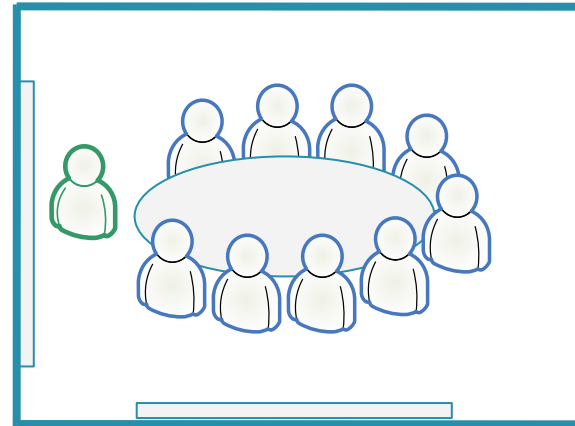
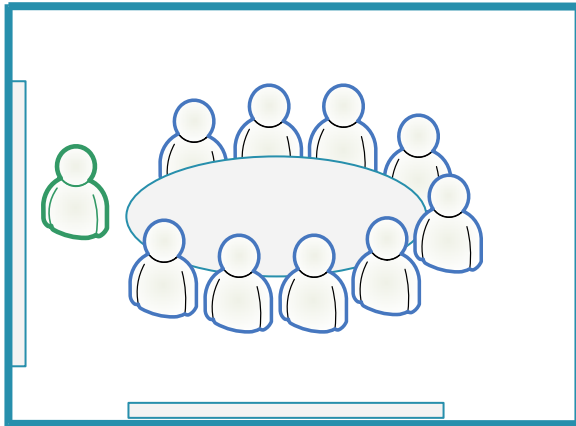
Step 3: Interviews



Step 4: Half-day Agile intro



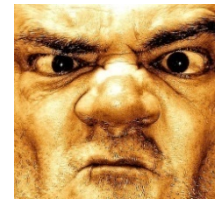
Step 5: Half-day workshops



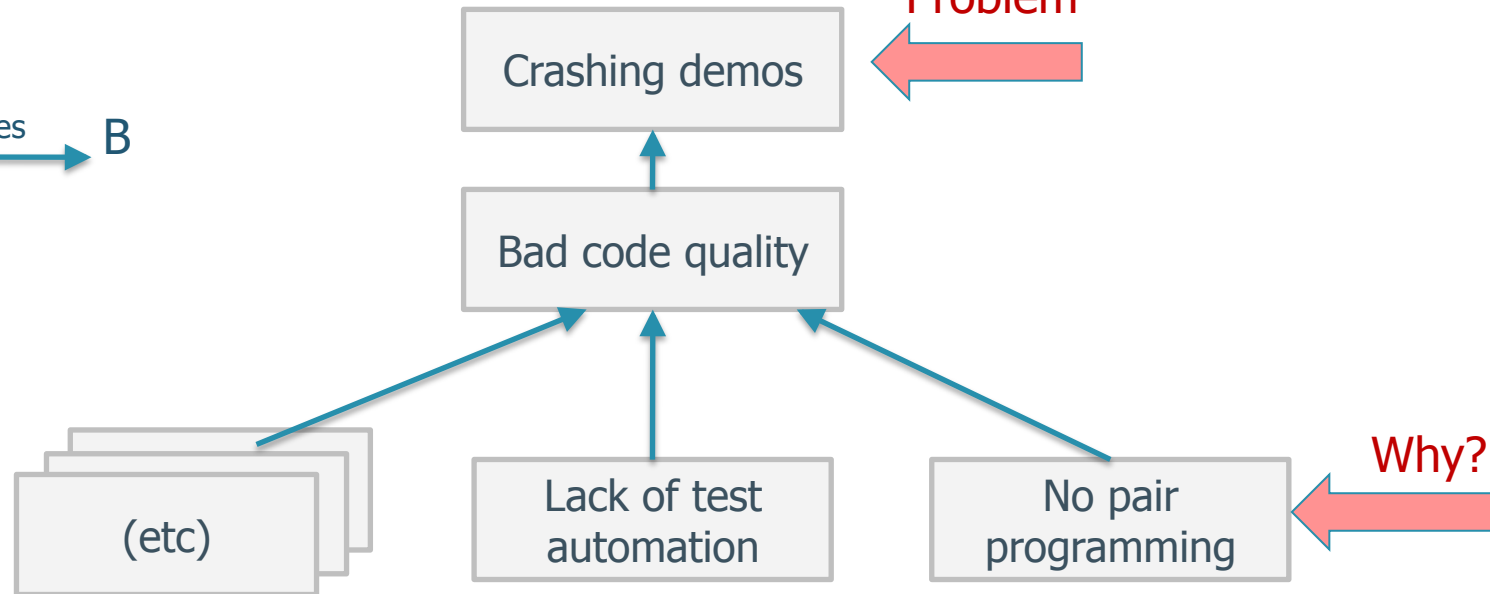
Technique: Cause-effect diagrams

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What is the problem?



A $\xrightarrow{\text{causes}}$ B



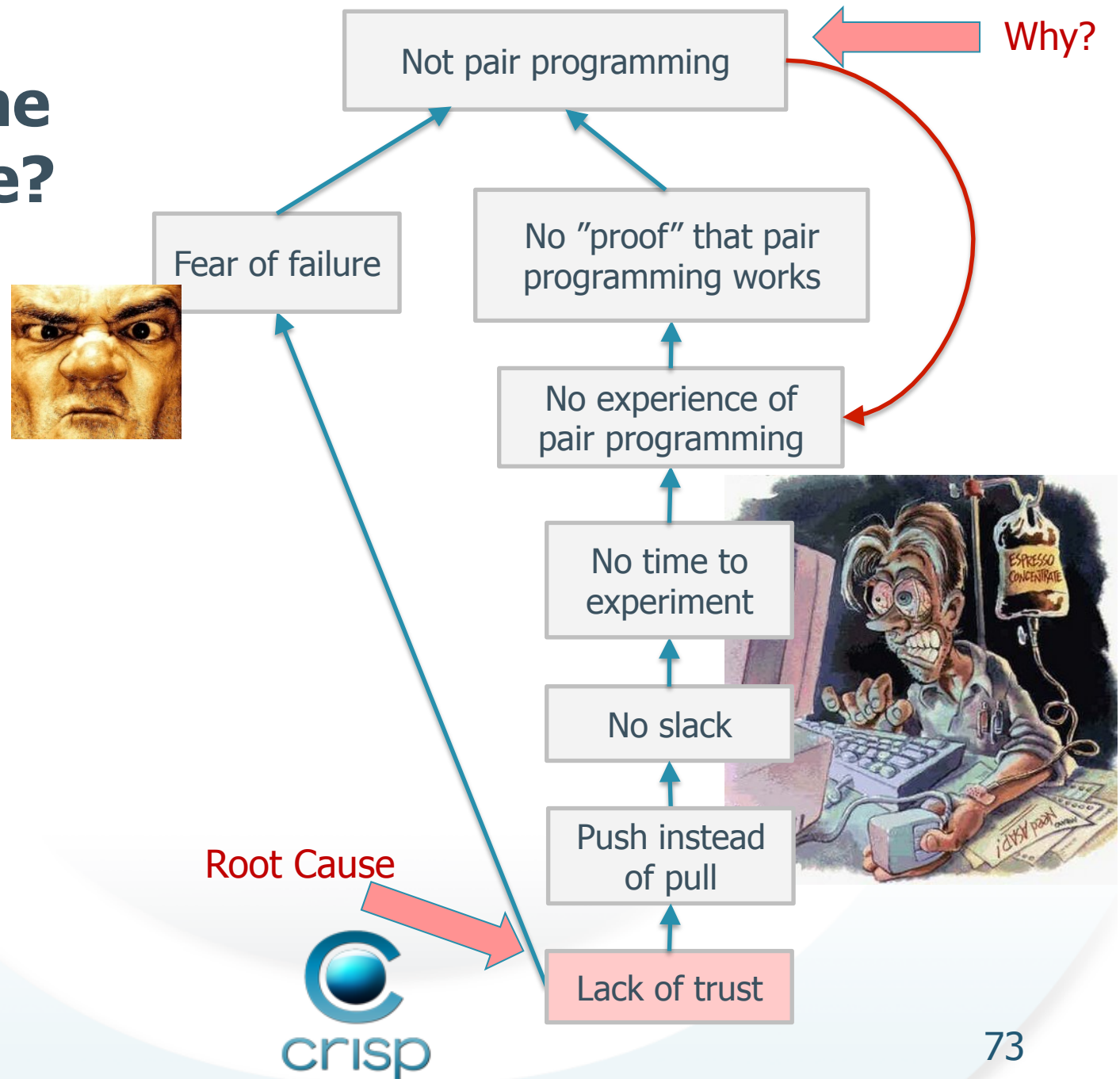
Henrik Kniberg

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

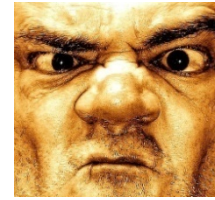
Really?



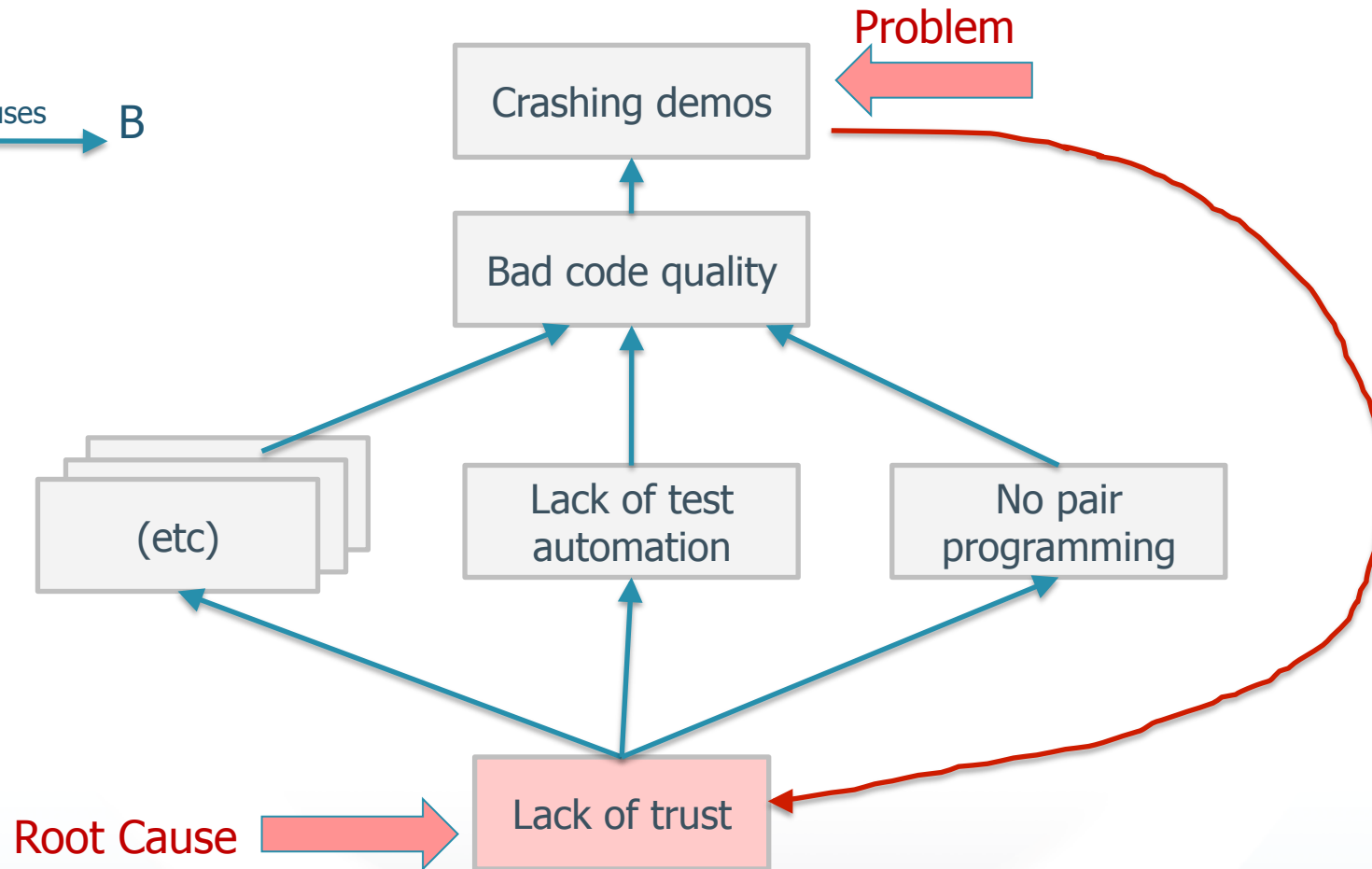
What is the root cause?



Spot the loop



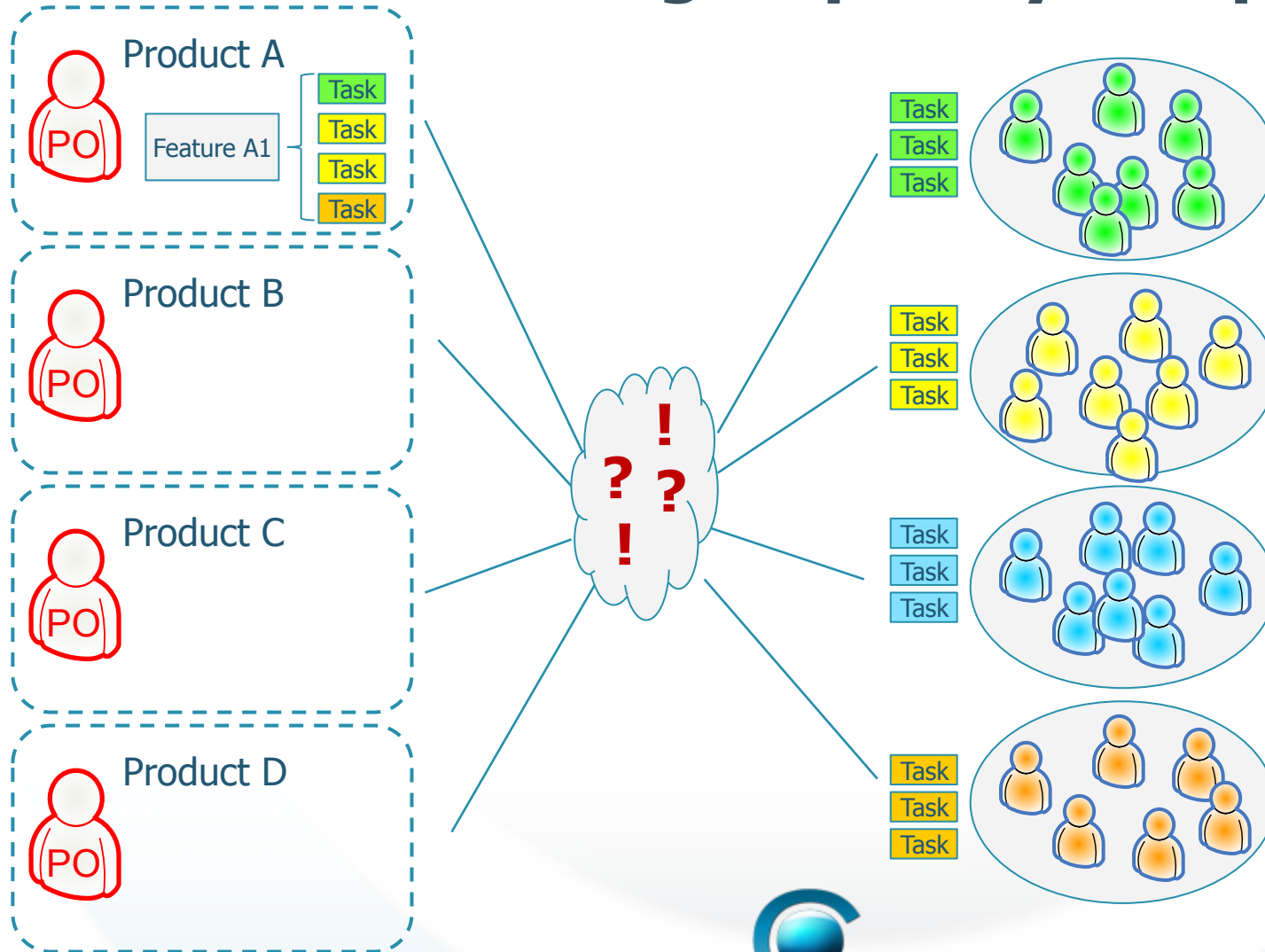
A $\xrightarrow{\text{causes}}$ B



Example: self- reorganization

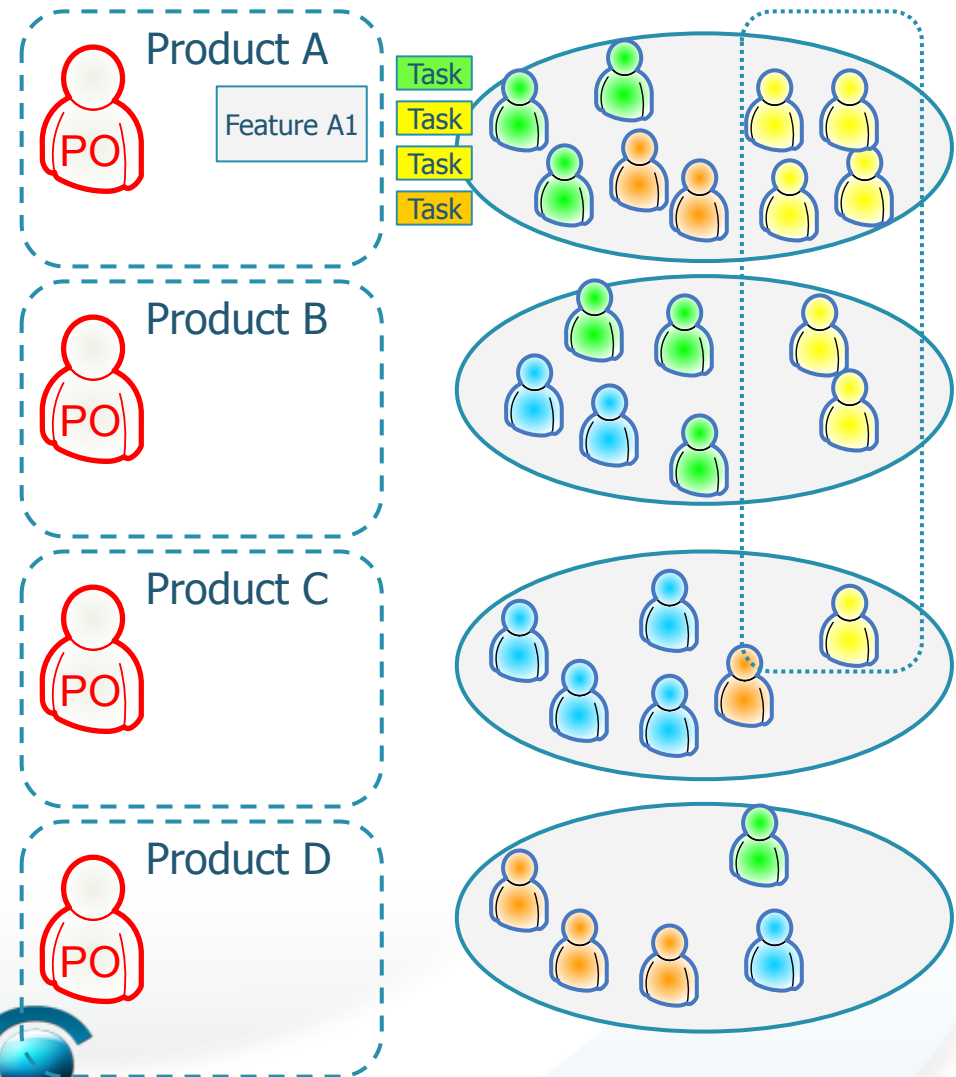
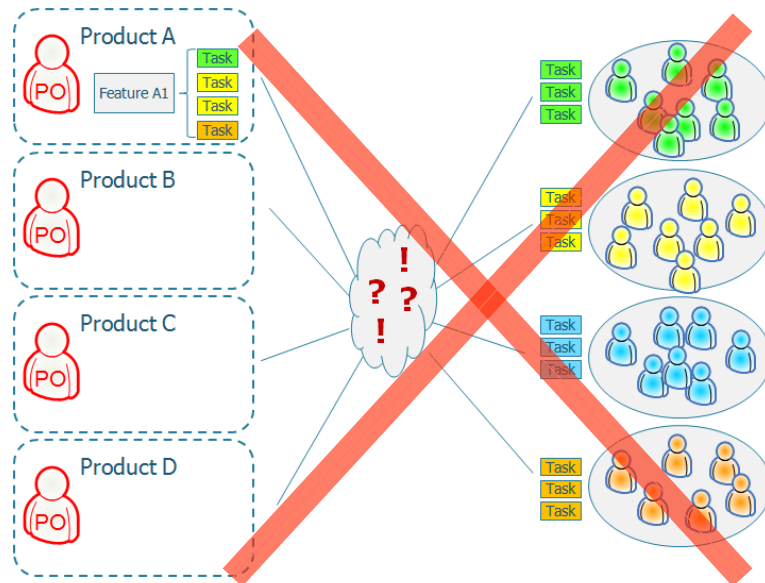
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Problem: Teams grouped by component



Henrik Kniberg

Goal: Feature teams



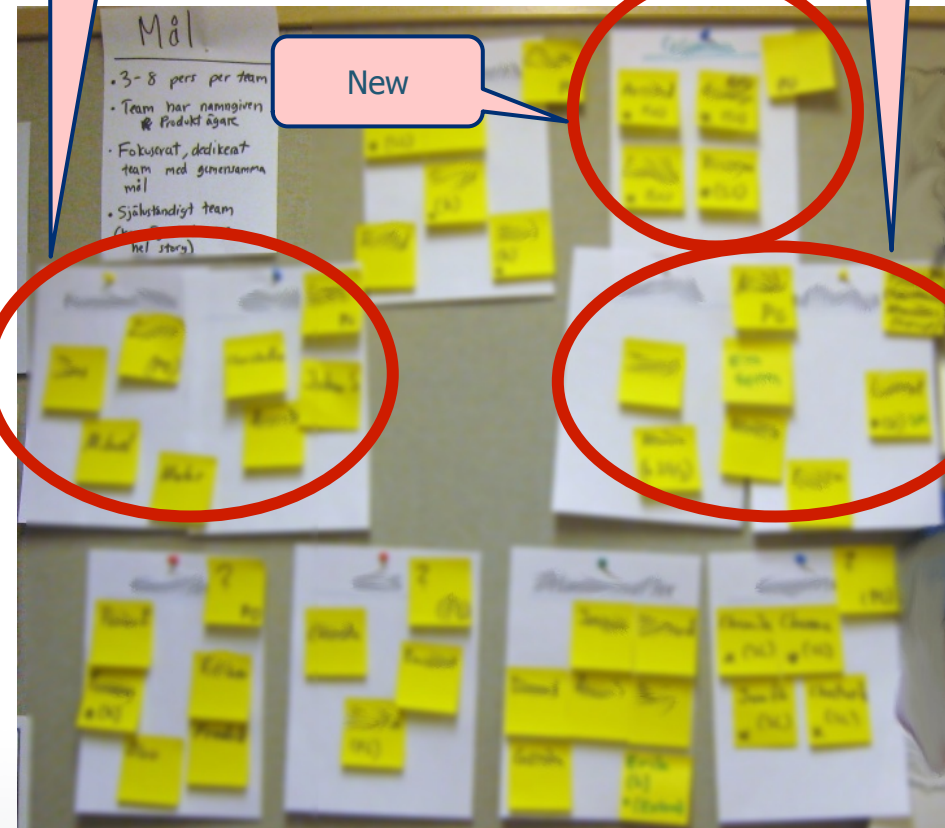
Self-organizing to form new teams

Preliminary team allocation



Combined

After a week in the kitchen



Wrapup

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Your change

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



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

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

- **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?

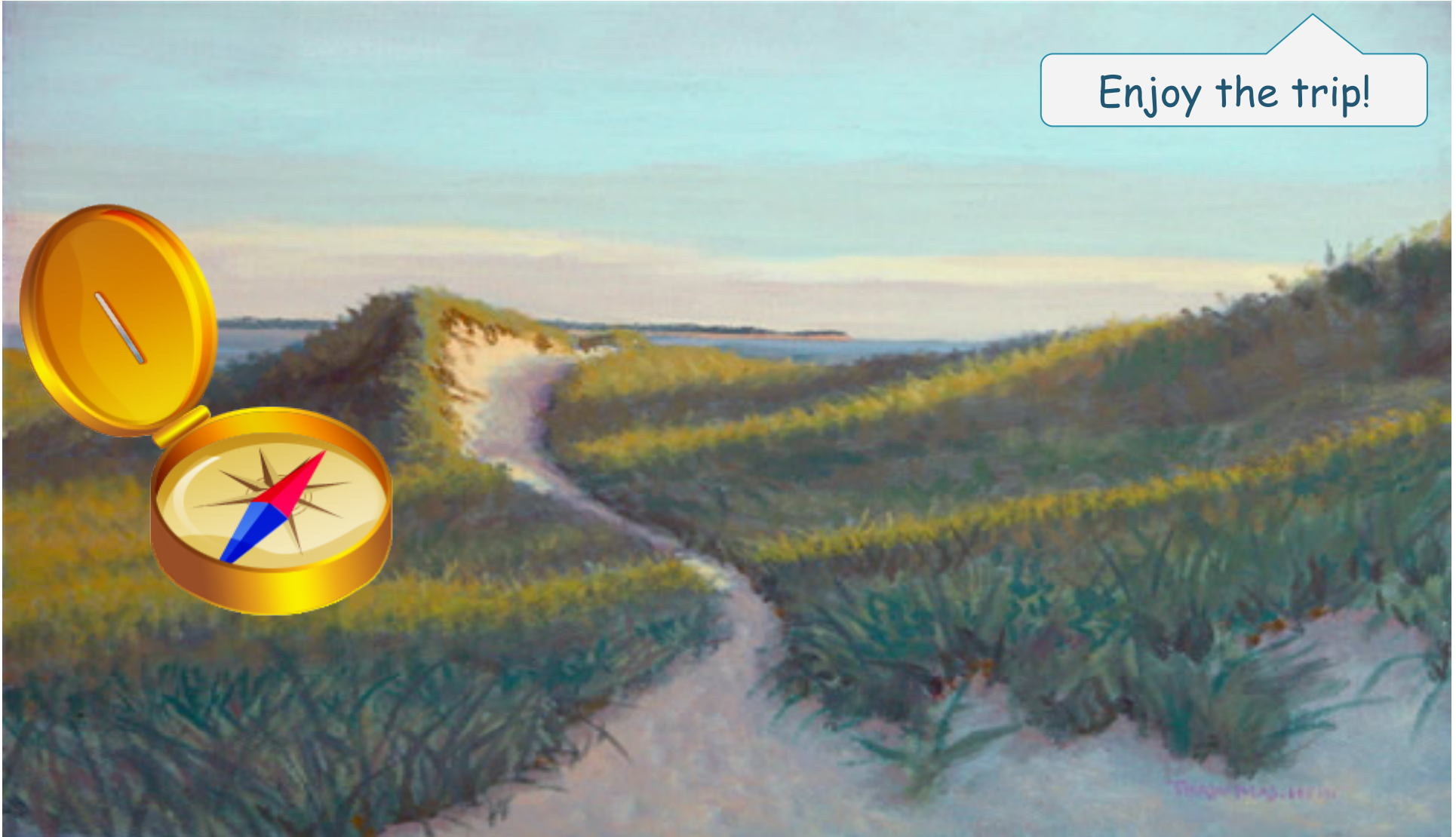


**Perfection is a direction,
not a place!**

Perfection is a direction, not a place



Enjoy the trip!



Henrik Kniberg

crisp

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