Techniques for a Successful Agile Transformation

Steve McDonald & Mark Landeryou

To keep an Agile transformation on track...

- A theoretical framework and guiding principles are crucial to underpin decision making.

- Remember change is hard. A disciplined approach is needed to avoid shortcuts that will otherwise dilute what you set out to achieve.

Sage Pay
Your complete payments solution

Online, face to face, phone and invoice payments

99.998%
Uptime

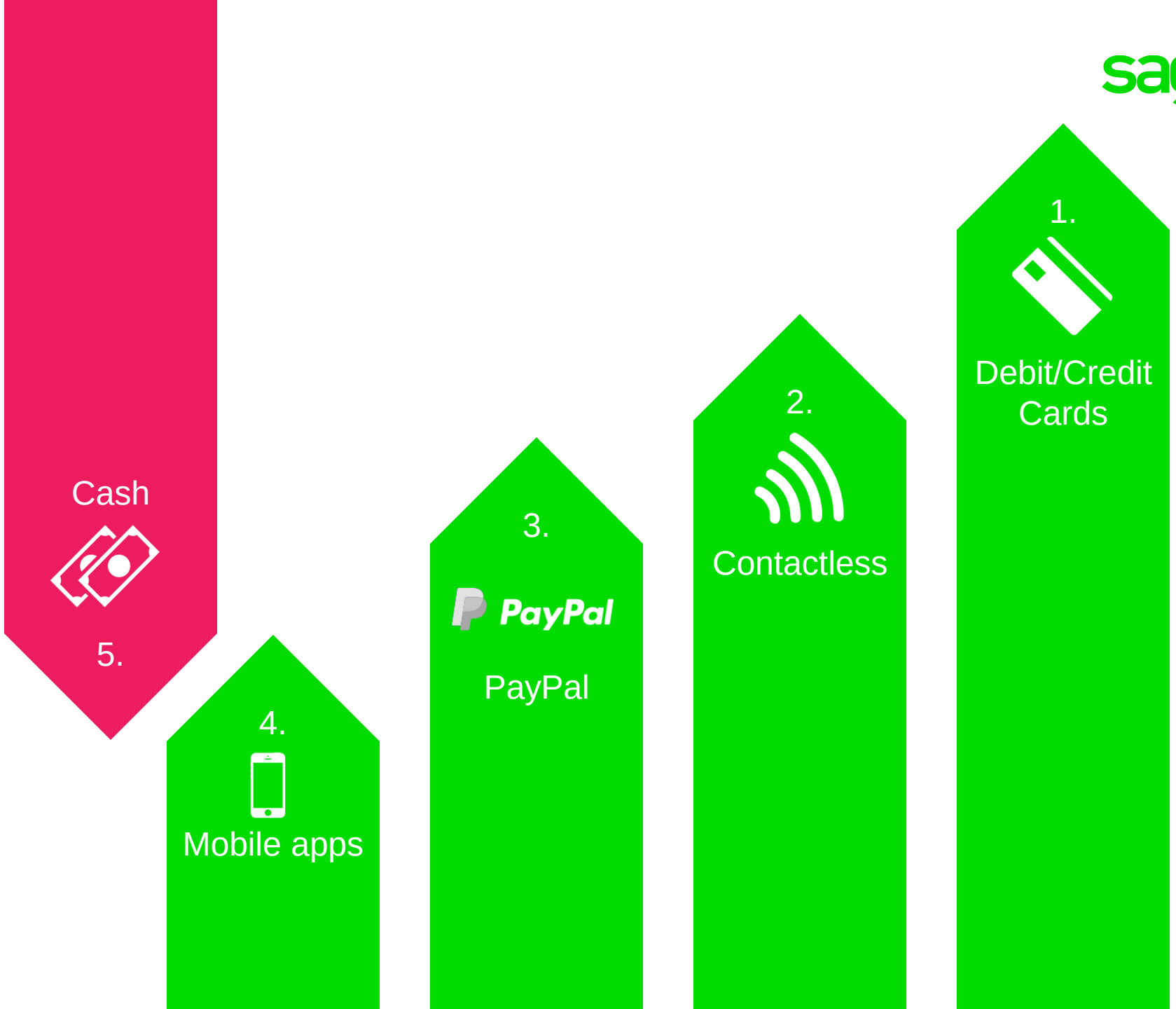
258
million

We securely process over 258m payments worth 21bn

We're helping over 50,000 businesses grow faster

Support
24/7
365 days a year

Priority support: UK based, 365 days a year


1.
Debit/Credit Cards
2.
Contactless
3.
PayPal
PayPal
4.
Mobile apps
5.
Cash

Other Alternatives

More options for the customer

2015

sage

- £1B payments per month
- 100+ commits a week
- 30 developers

189 **Customer facing releases**

99.998 **Industry leading uptime**

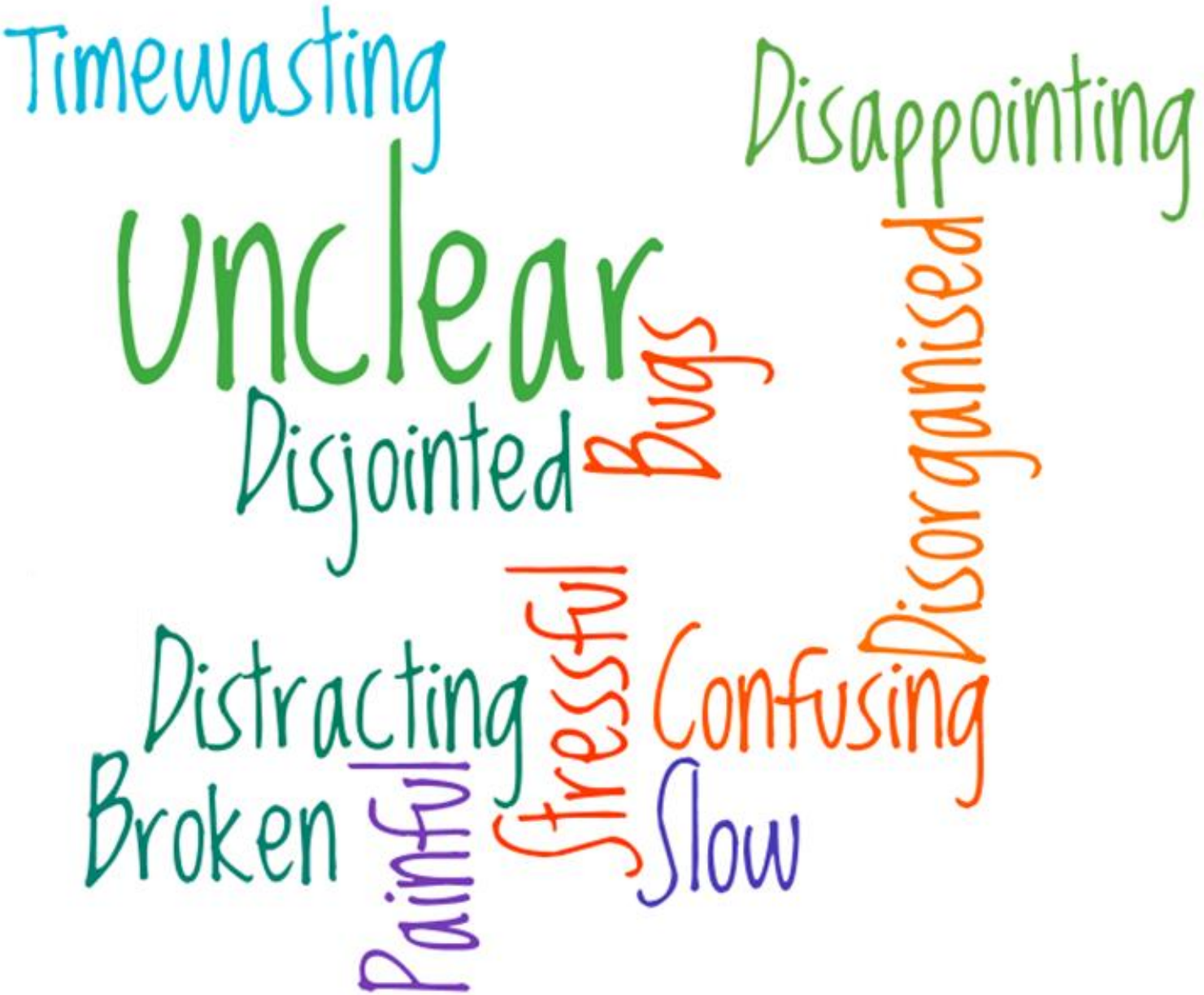
24 hrs **Delivery time to customers**

78% **Fewer bugs then in 2012**

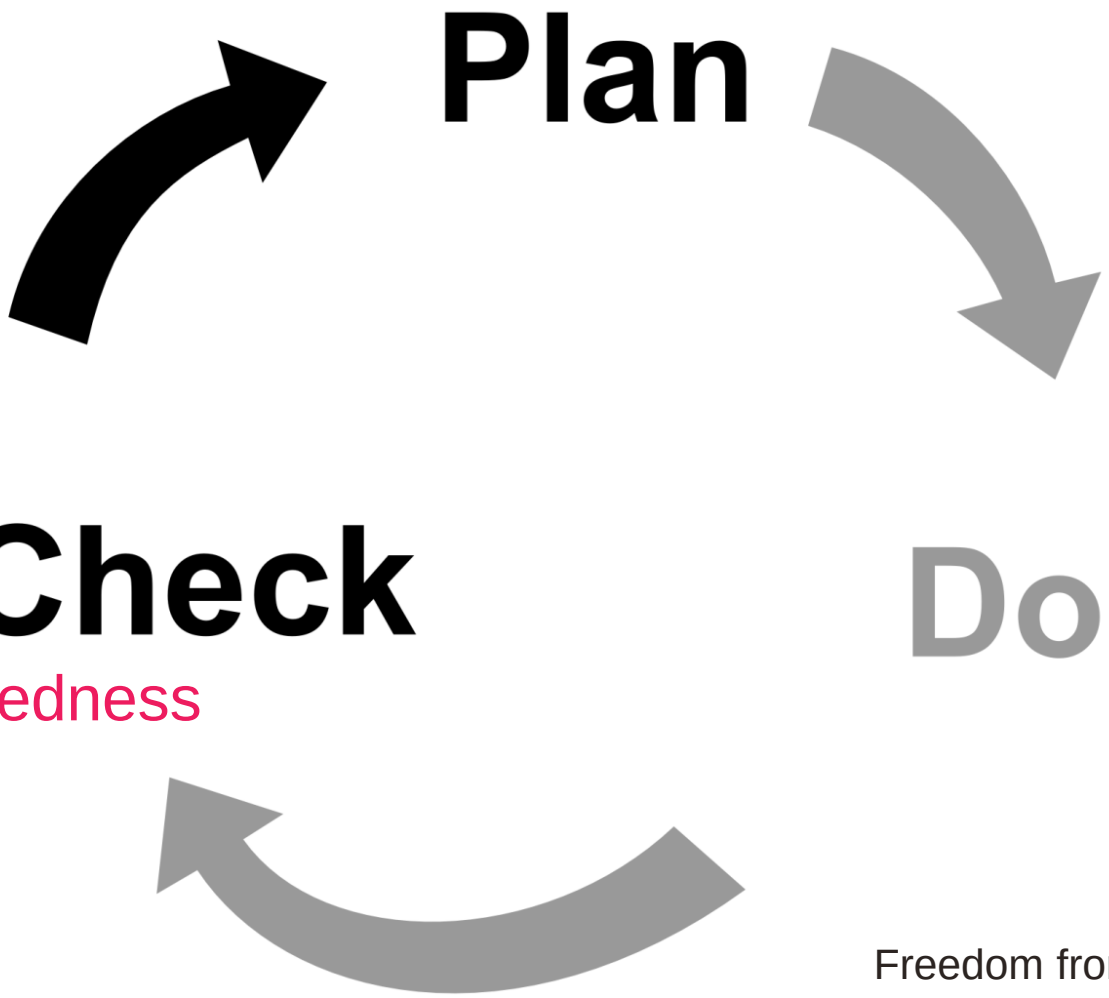
2012 was tough…

2012 was tough…

sage



Stage One - Exploring



Discovery

Open mindedness

Freedom from command & control
John Seddon (2005, p101)

Definition of Success

Stop us being **scared** of changing our systems

Diagnosis

Developers:

"If only we could rewrite the system"

Testers:

"Stop the devs handing over a couple of days before the delivery date. Give us more time to test it properly"

Customer Service:

"Stop changing stuff"

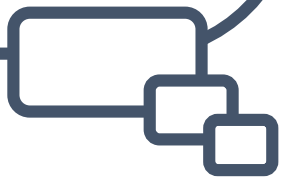
Project Managers:

"Let's start cracking the whip"

Systems thinking

"…the complexity of the real world can best be tamed by seeing things in the round, as a whole.

Only by taking a broad view can we avoid the twin dangers of **a silo mentality** – in which a fix 'here' simply shifts the problem to 'there' – and **organizational myopia** – in which a fix 'now' gives rise to a much bigger problem to fix 'later.'"



Dennis Sherwood – Seeing the forest for the trees a manager's guide to applying systems thinking p1 (2002) *emphasis added*

Plenty of fixes

Crystal **Agile** **Scrum**

DAD **TPS** **Kanban**

DSDM **XP**

How did we decide?

Tip of the day

To keep on track...

Follow every aspect of your chosen practice, until you have the experience to change it.

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Approach

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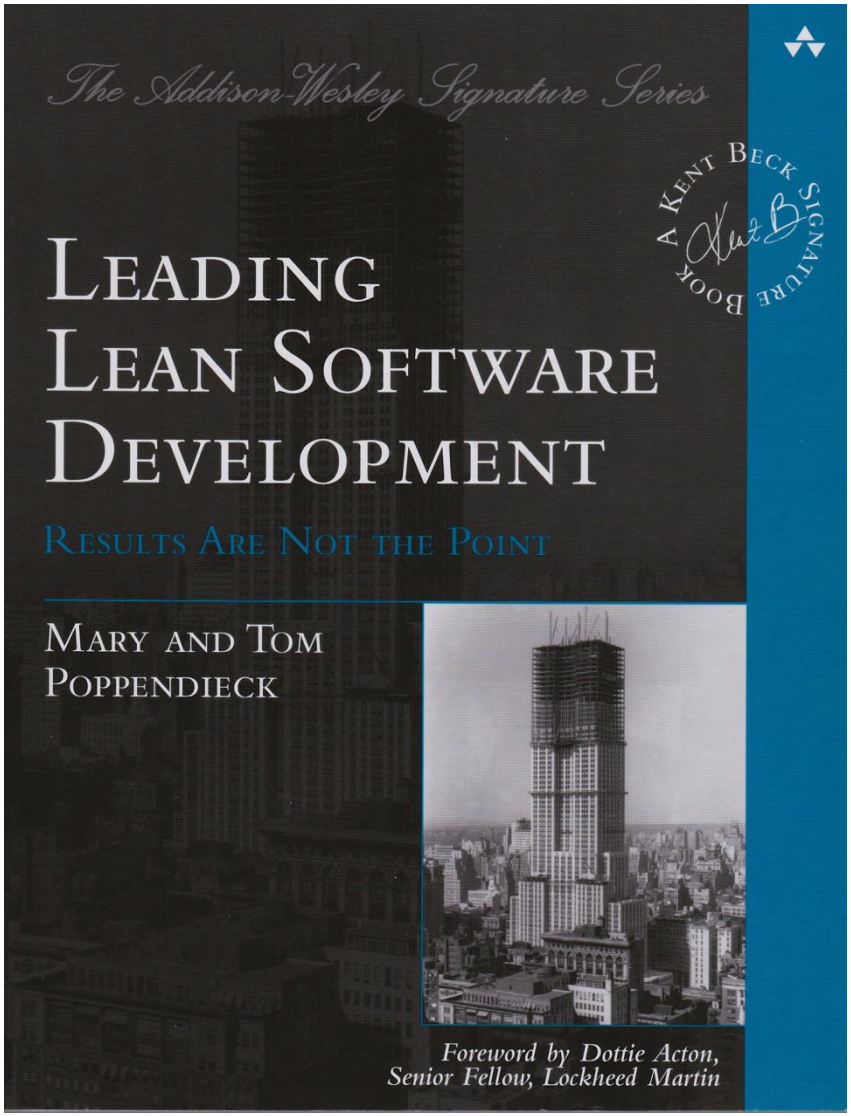
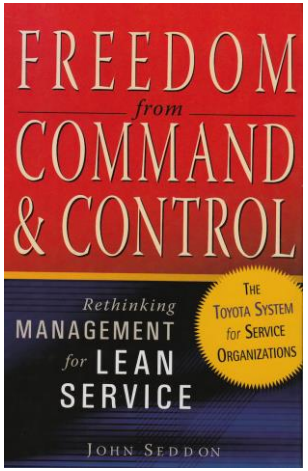


Our Field Guide

Links systems thinking to software practice



Getting buy-in from above

Tip of the day

To keep on track...

- **Get buy-in from the top.**
- **Be a salesman.**
- **Be honest.**

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Getting buy-in from the teams

Quantify your goals

If you can’t put a number on something then admit “your knowledge is of a meagre and unsatisfactory kind.”

Lord Kelvin,1893 (paraphrased)

Quantification, even without subsequent measurement is a useful aid to clear thinking and good communication.

Gilb's Law of Quantification, Tom Gilb (www.gilb.com)

Tip of the day

To keep on track...

Set quantified goals

- to aid alignment and discussion
- to share understanding

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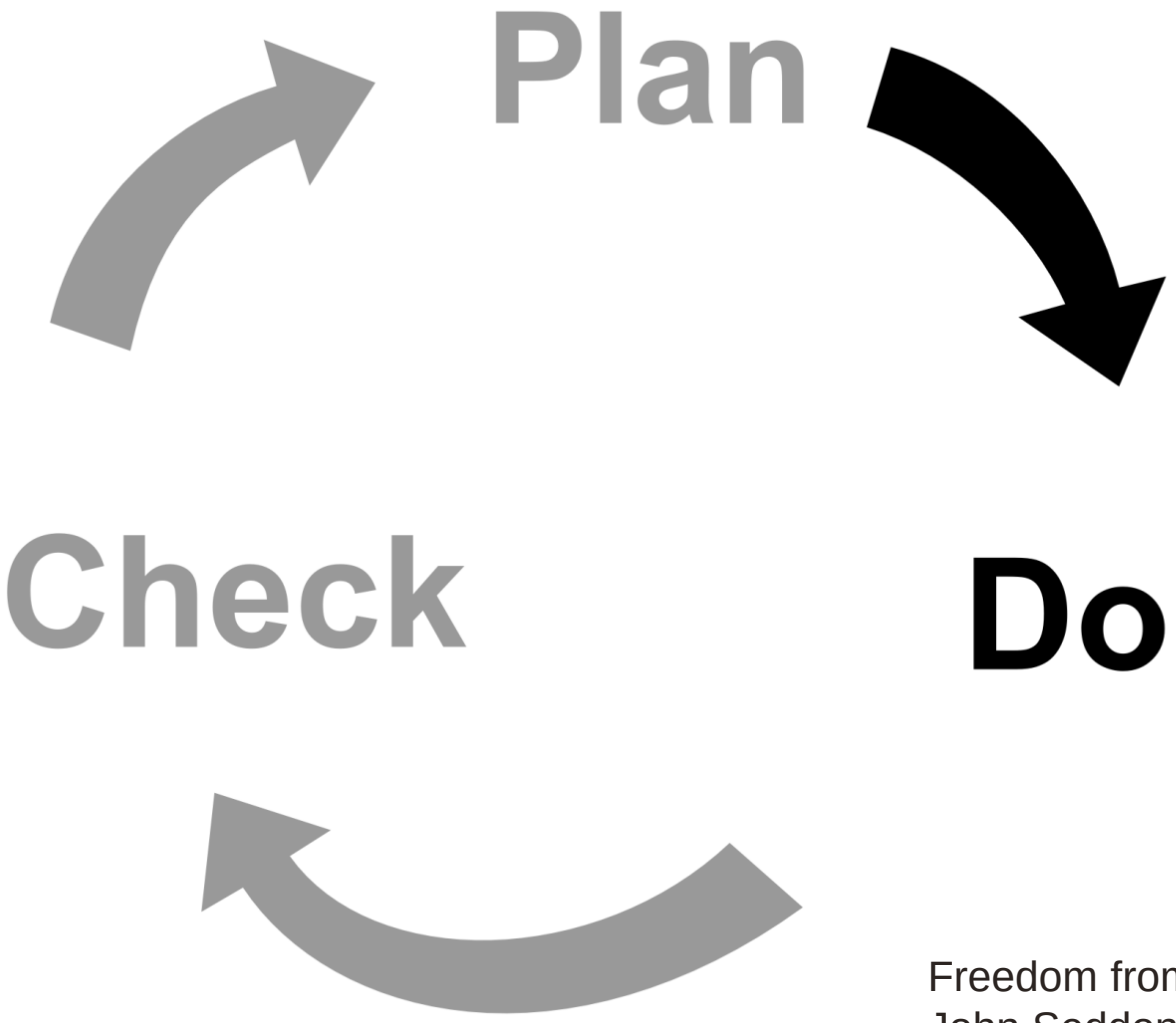
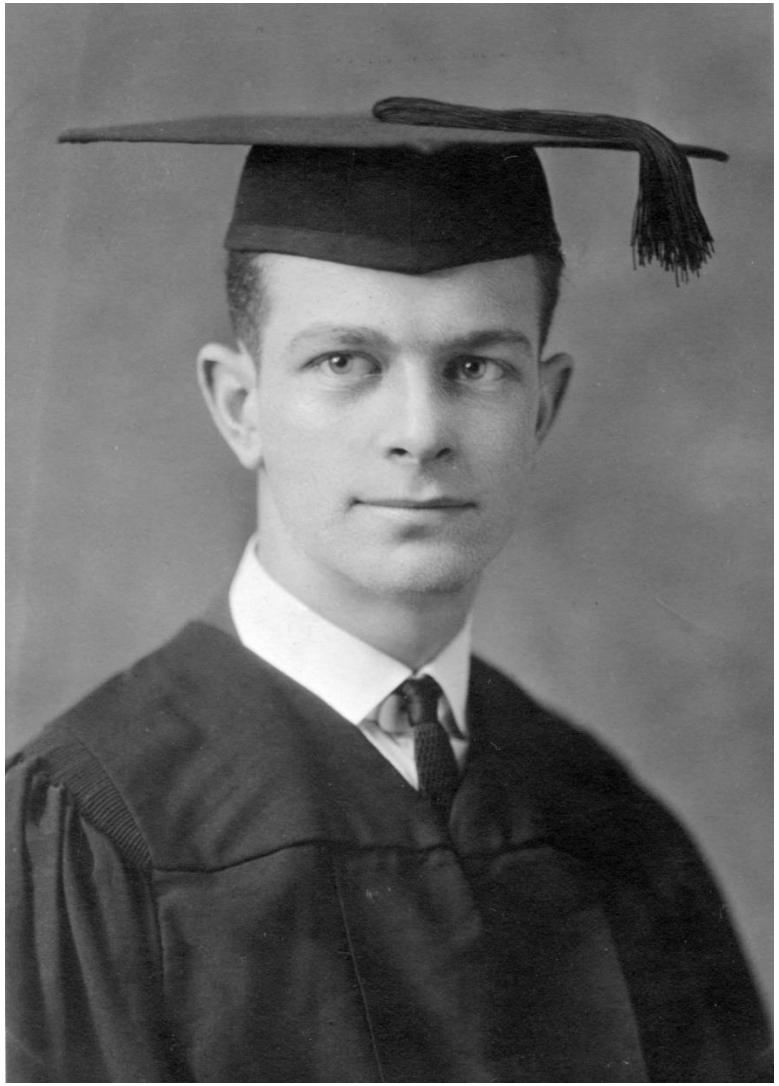
Stage Two - Enacting



Freedom from command & control
John Seddon (2005, p101)

How we got started



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- Education
- Sat teams together
- Shared knowledge
- Allowed exploration

Safety Directives

Mandated key practices:

- By the book Scrum
- Pairing (POs didn’t like)
- TDD (Devs didn’t like)
- Weekly Sprints (No-one liked)

“Some of the best systems thinkers I know are bossy; they are bossy about the right things.”

John Seddon. Systems thinking in the public sector p.47.

“It is better to do the right thing wrong, than the wrong thing right”

Russell L. Ackoff, Transforming the systems movement (2004)

Tip of the day

To keep on track...

- **Mandate key practices.**
- **Change the system to get feedback.**

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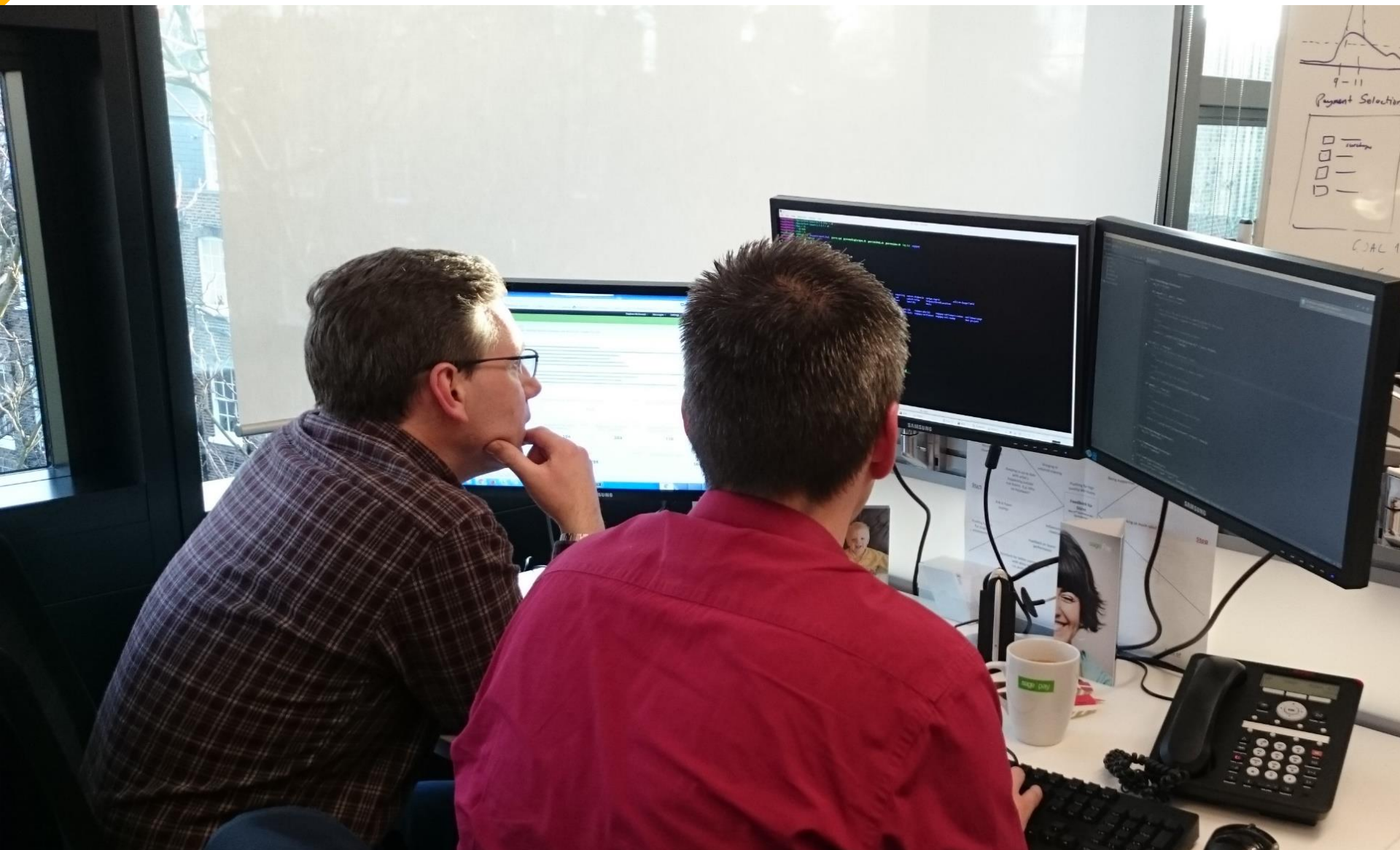
Leading by example



Stamping on problems

Tip of the day

To keep on track...

- **Transformation should throw up hundreds of problems.**
- **Seek out and remove impediments relentlessly.**

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Stamp on problems…

…but not on people

“Drive out fear, so that everyone may work effectively for the company.”

W. Edwards Demming,Out of the crisis (1982) p 23

“Are we even allowed to say no?”

The Phoenix Project, G.Kim, K.Behr, G.Spafford (p 196)

Tip of the day

To keep on track...

Don’t compromise on technical excellence or quality.

- **Say no! Take less into a sprint.**
- **Fix the work to enforce discipline.**

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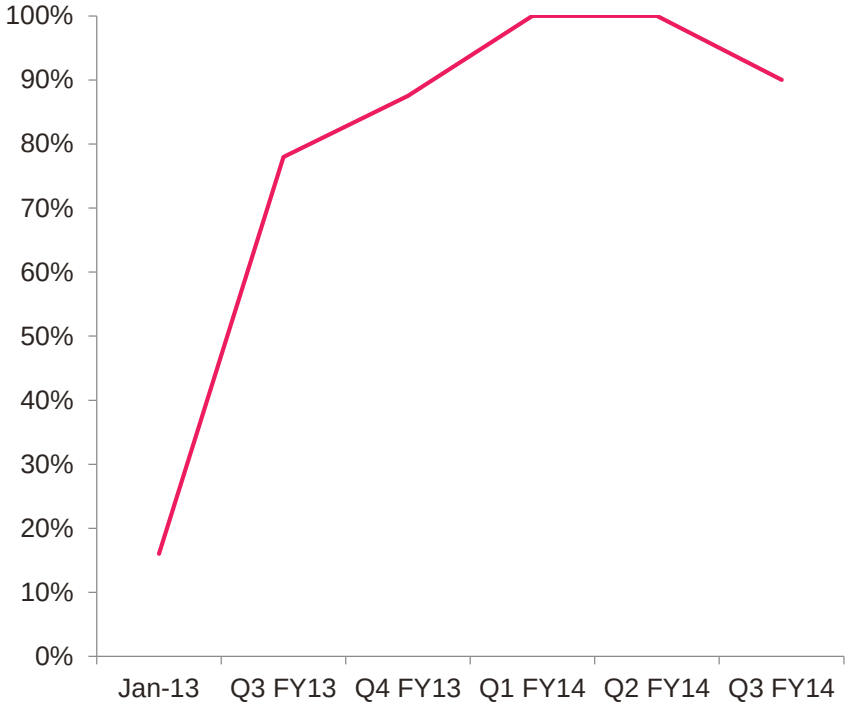
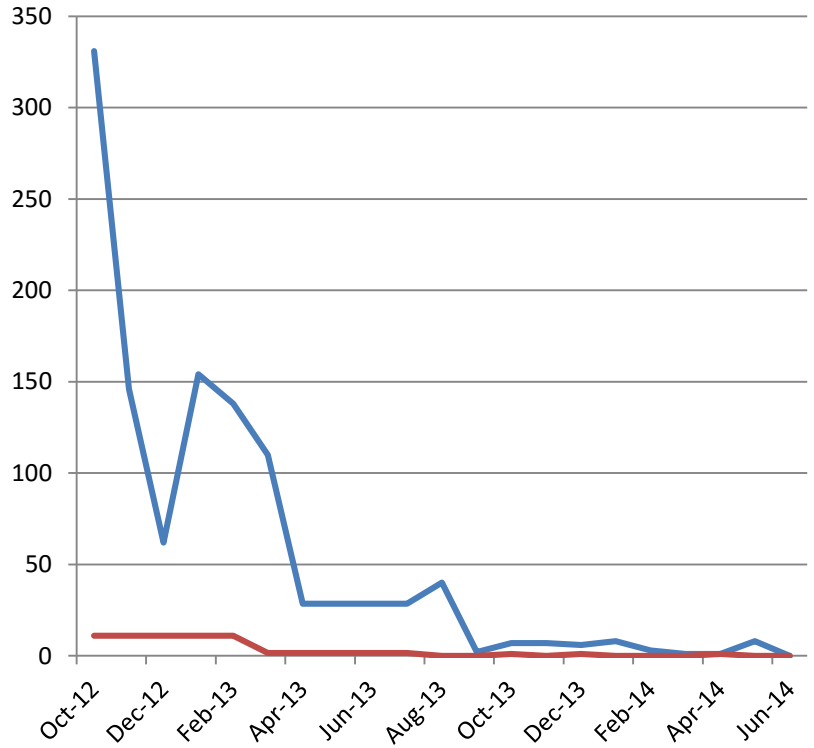
Results

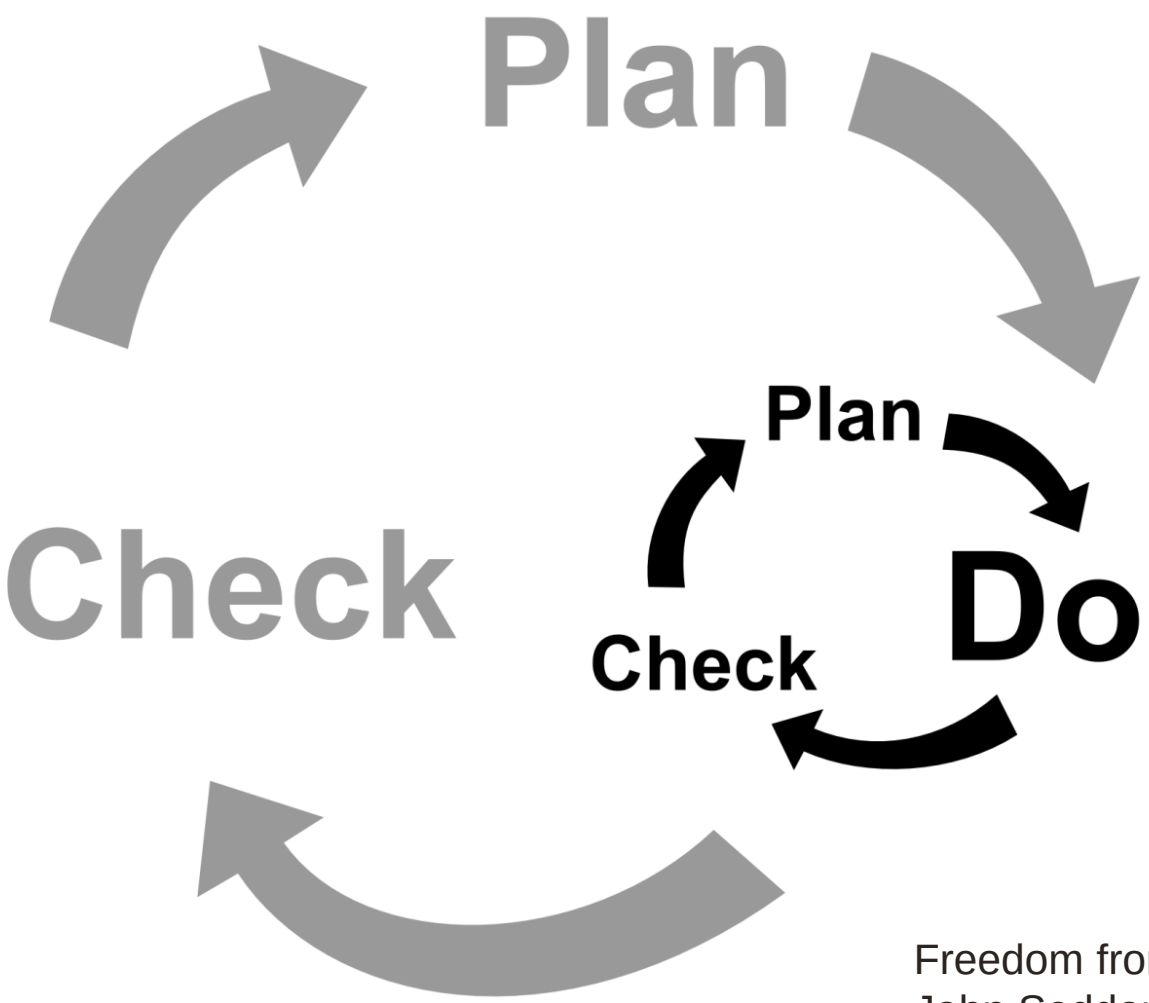
Release Success



Reported Bugs



Stage Three - Embedding

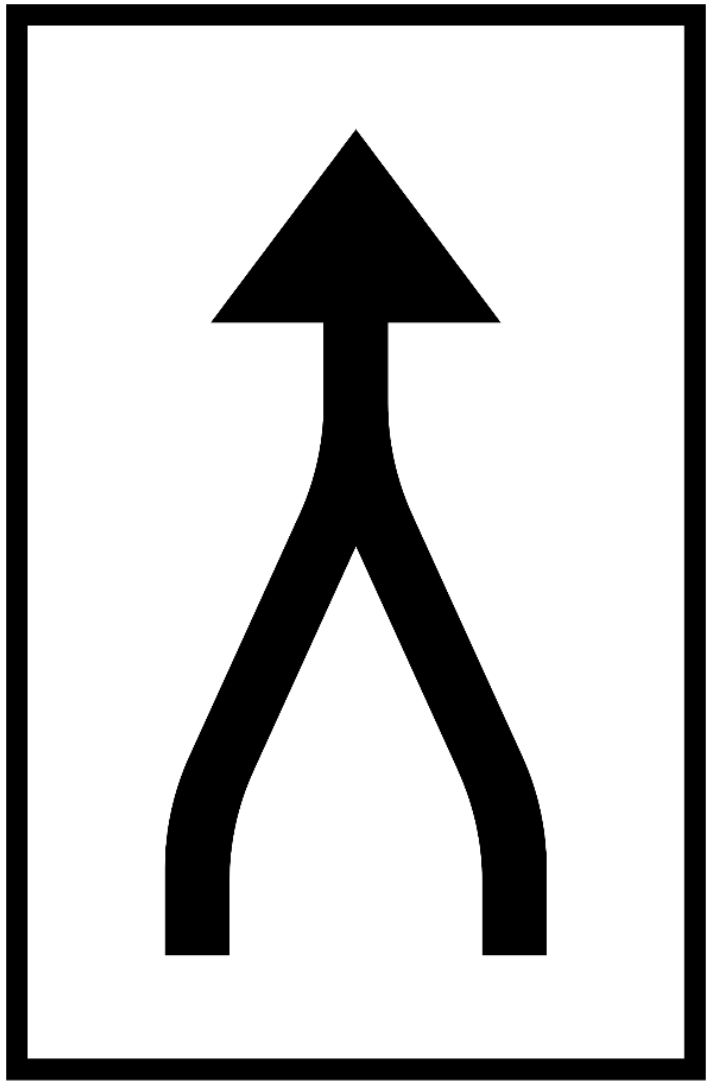


Improvement

Experimenting

Freedom from command & control
John Seddon (2005, p101)

Bottlenecks



~~Bottlenecks~~ Champions

“Developing people and the system so that together they are capable of achieving successful results is the point.”

Mary and Tom Poppendieck, Leading Lean software Development (p198)

Tip of the day

To keep on track...

Remove bottlenecks by:

- **Everyone together early on.**
- **Skill up.**

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Open Architecture

“...the people who do the work must be able to decide the 'best' way to handle any particular customer demand.”

John Seddon, Freedom from Command & Control: Rethinking management for Lean Service (pp64)

Tip of the day

To keep on track...

- **Shared decisions.**
- **Anyone challenges anything.**

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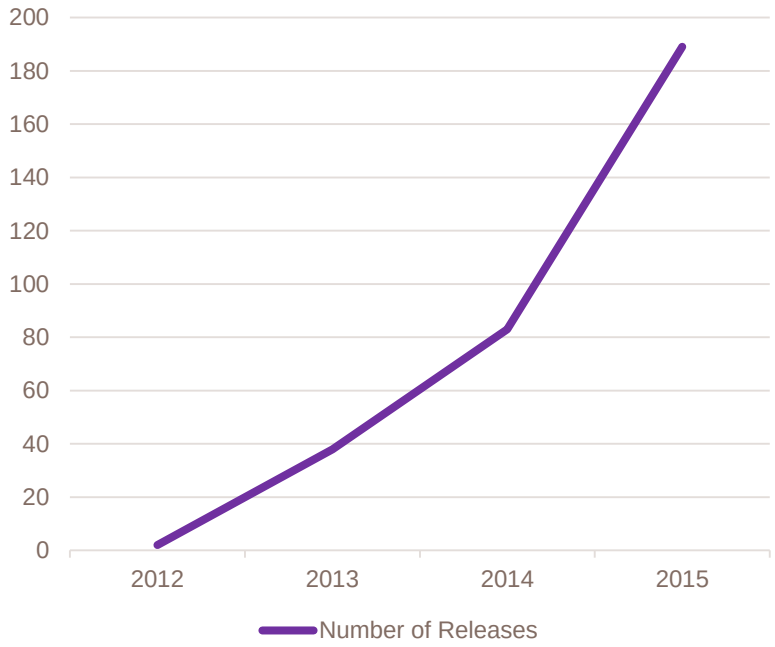
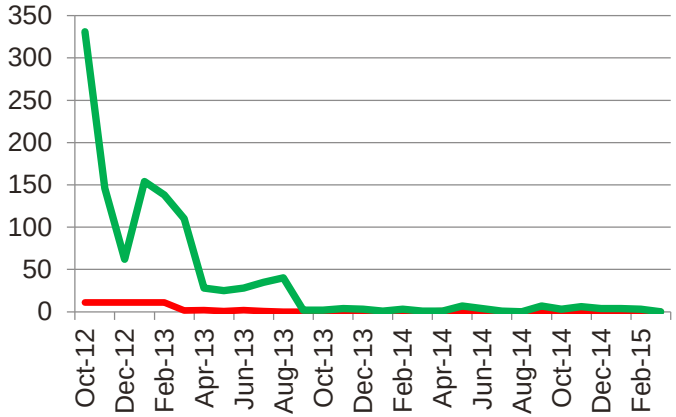
Results from 2012-2015

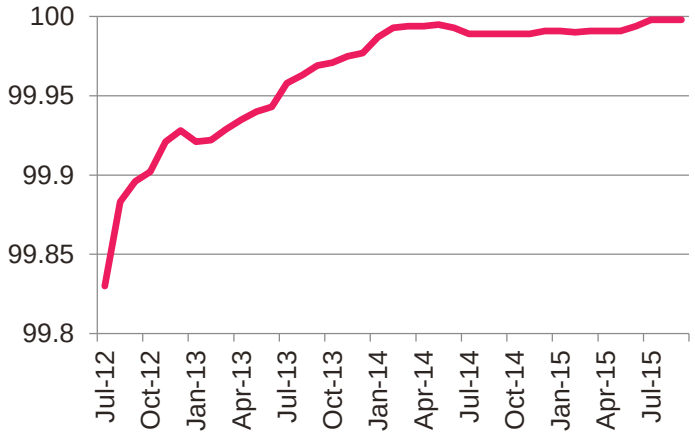
Number of Releases



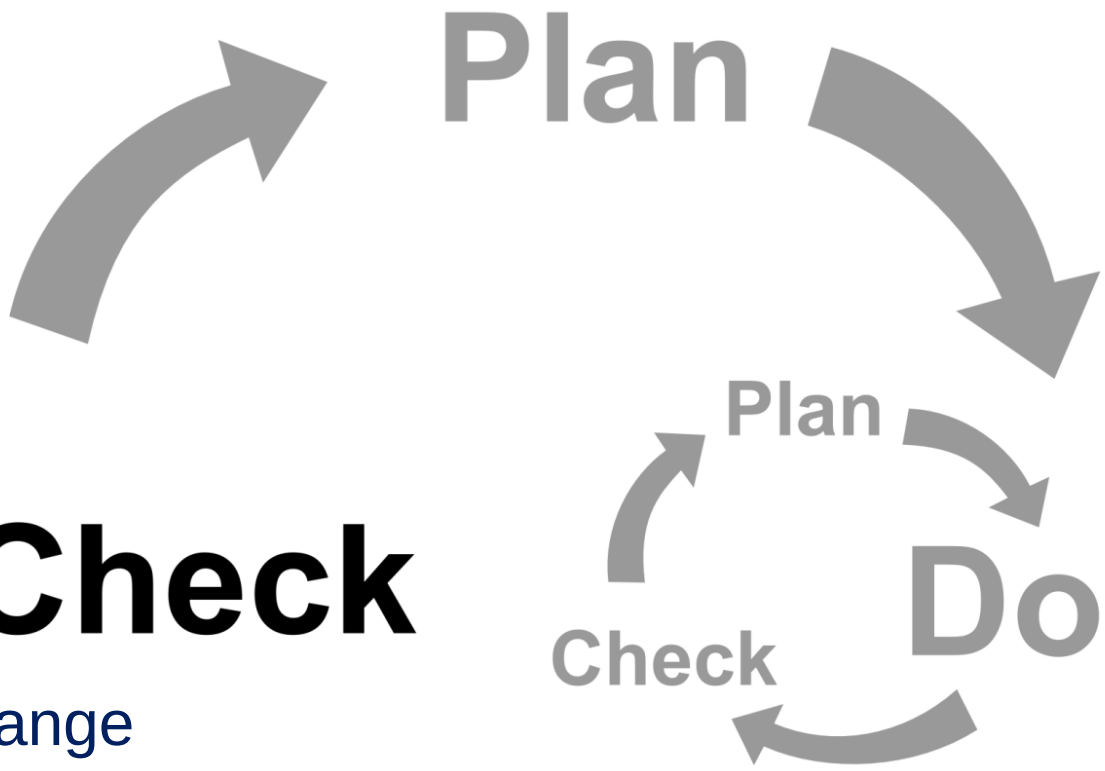
Bugs



Uptime



Stage Four - Evolving

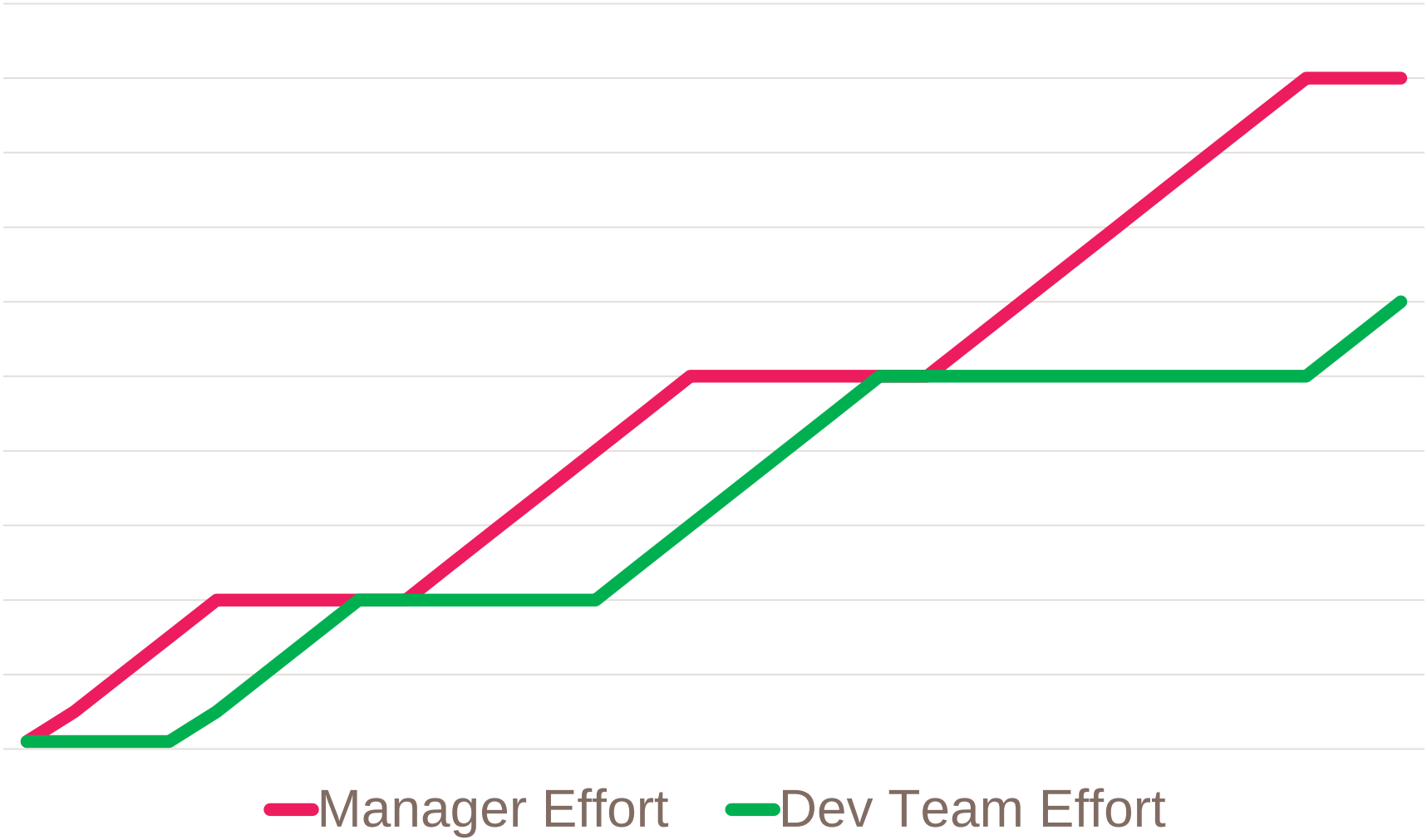


Step change

Transformation

Freedom from command & control
John Seddon (2005, p101)

Change isn’t comfortable



Tip of the day

To keep on track...

- **Don’t expect what worked at the beginning to continue working.**
- **Be ready to reverse earlier decisions.**

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4 Take-Aways

- Take a holistic view.
- Everyone together early on.
- The system keeps you disciplined.
- Build for real, piece-by-piece.

Credits

References

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