

Reducing risk with continuous delivery

BY JOEL CHIPPINDALE - NOVEMBER 2014

A story about FutureLearn

**How many of you work in continuous
delivery environments?**

How do you explain the benefits?

What is continuous delivery?

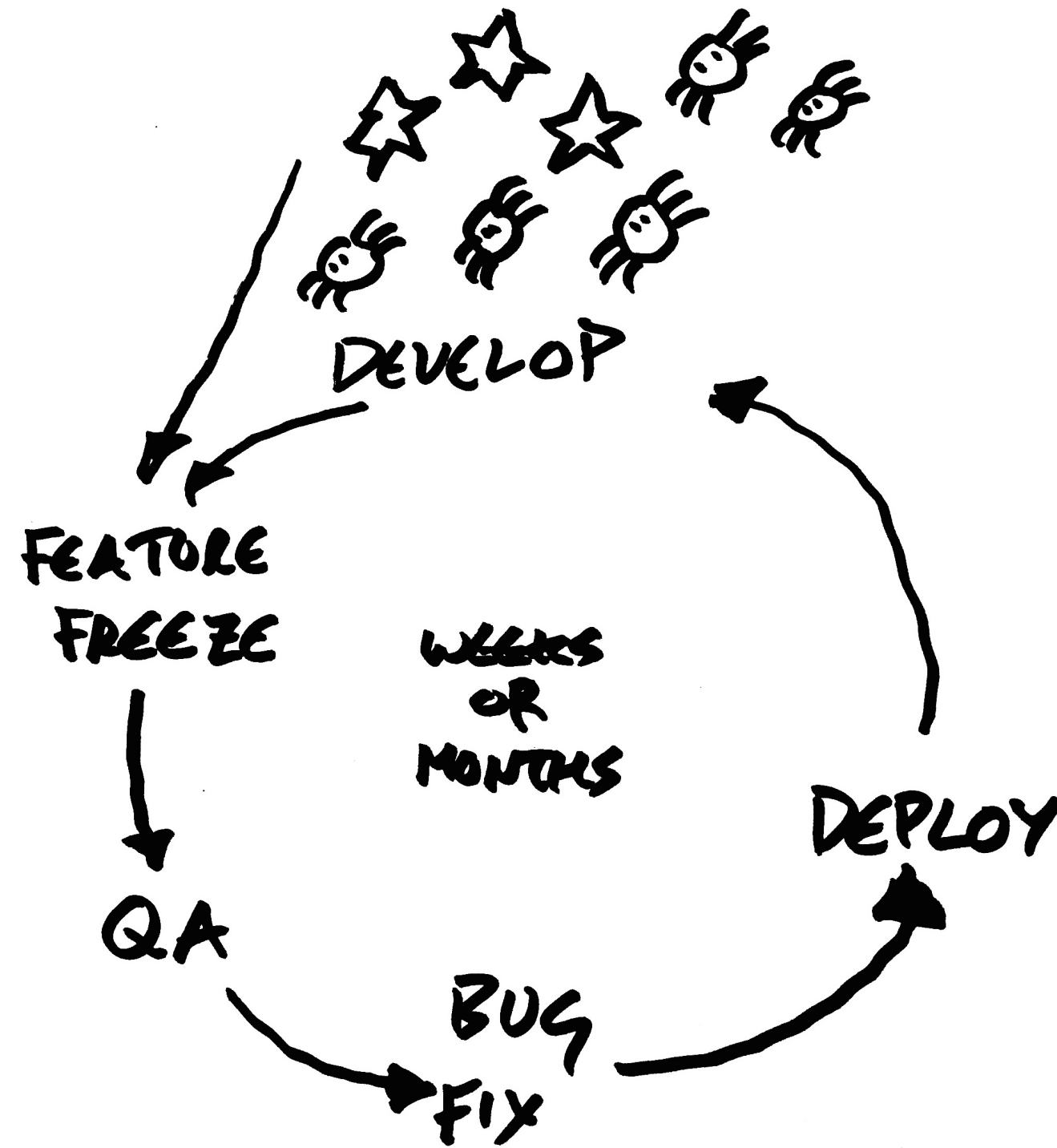
What is continuous deployment?

What is deployment?

**All the work required to make a
new feature available to users**

Release based deployment

Process



Benefits

- **QA have time to check each release before it goes live**
- **Marketing can announce releases**
- **Defined process sounds reliable**

**But what happens when
something goes wrong?**

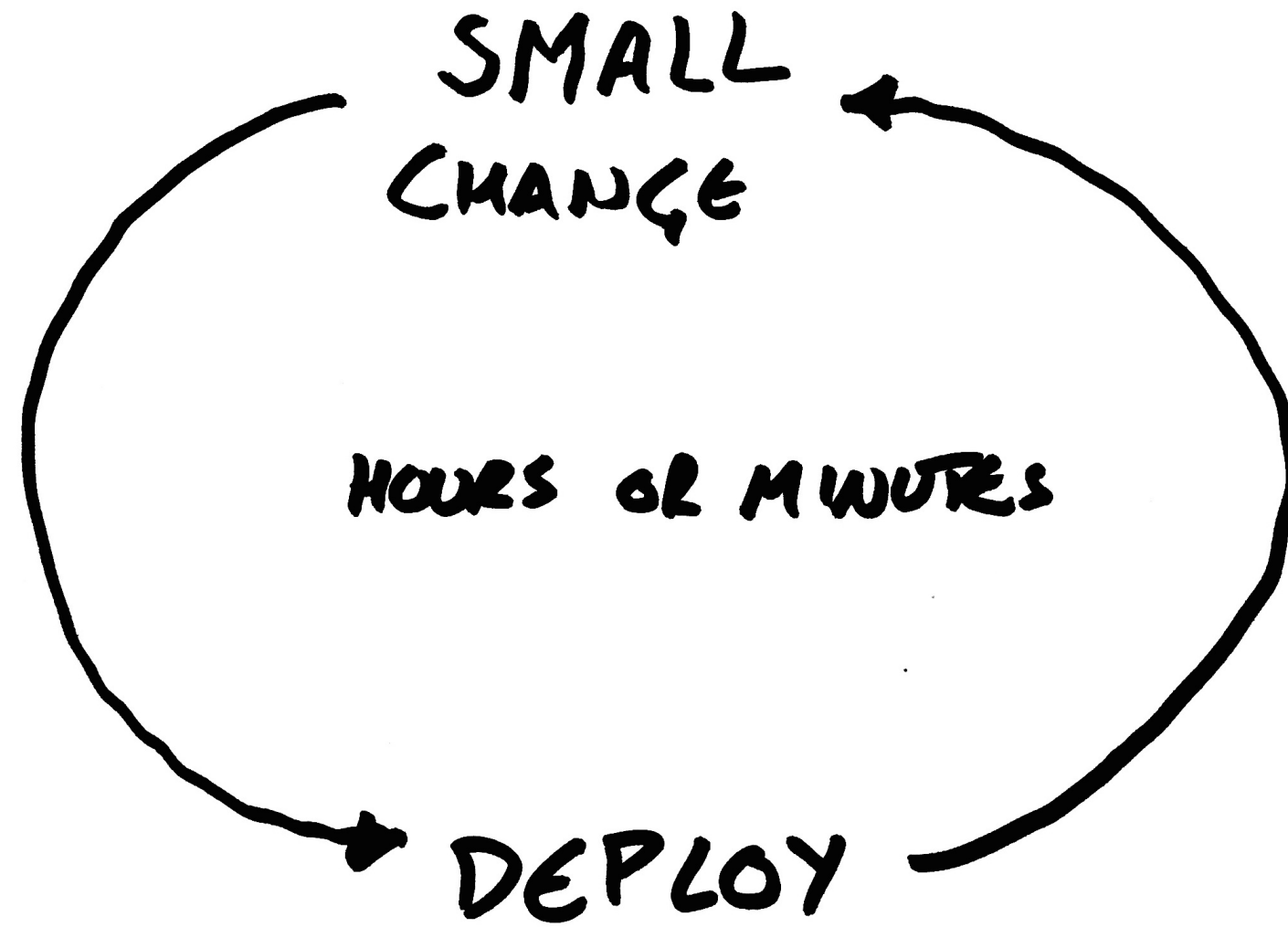
- **Bugs found in QA can delay ALL features.**
- **Features may miss the 'release window'**
- **How are bugs fixed that are found AFTER QA?**
- **Scheduled downtime?**

**Big releases are complicated
releases**

**The more complicated the release the greater
the chance that something will go wrong**

Continuous deployment

Process



- ~~Bugs found in QA can delay ALL features.~~
- ~~Features may miss the 'release window'~~
- ~~How are bugs fixed that are found AFTER QA?~~
- ~~Scheduled downtime?~~

Benefits

- **Features and bug fixes available as soon as they are ready**
- **Most deployments can be made with zero downtime**

Continuous deployment
vs.
Continuous delivery

Case study 1: Etsy

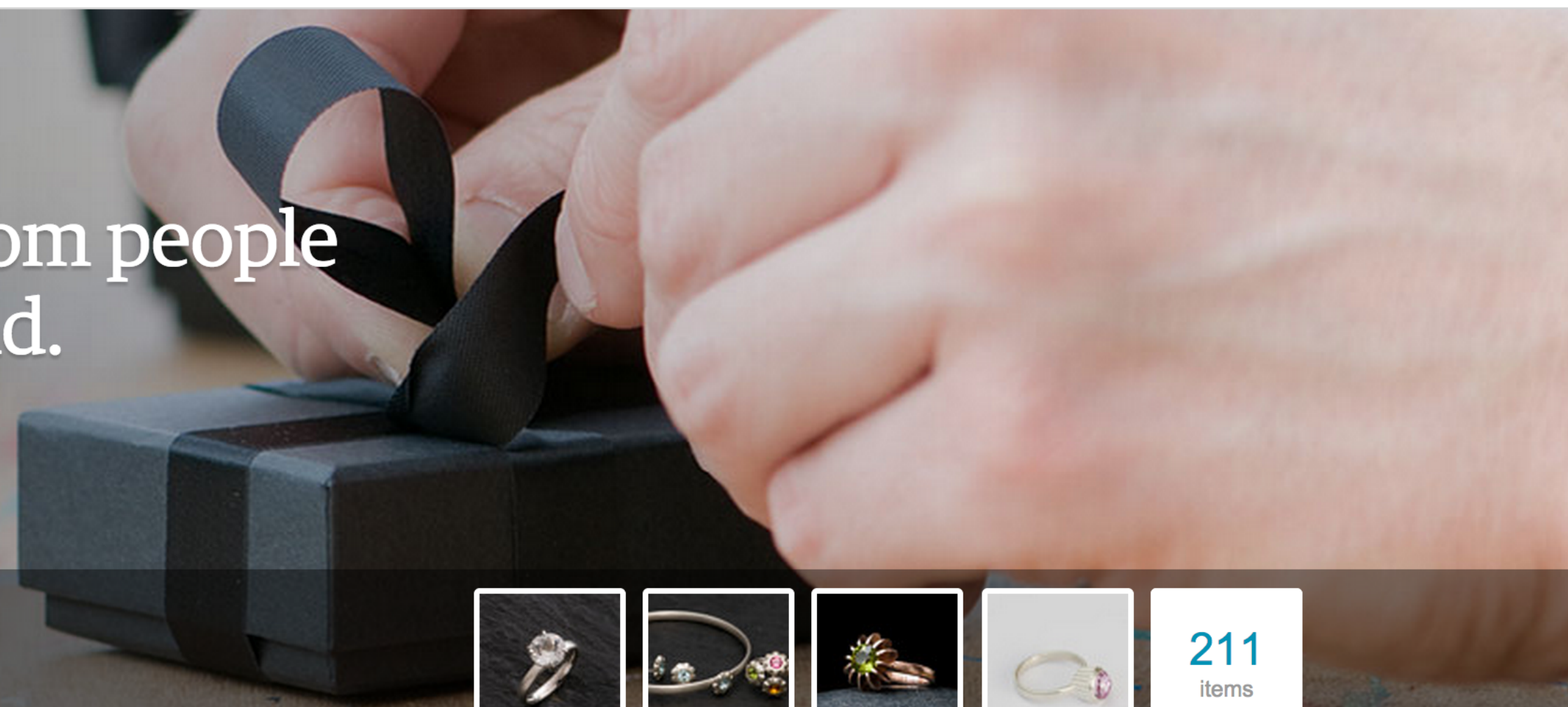


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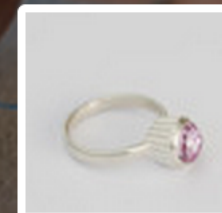
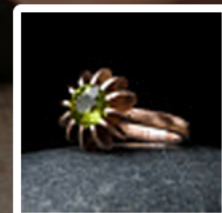
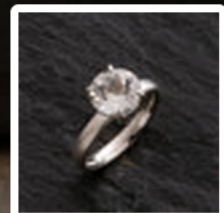
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**More than 1 billion dollars worth
of sales made on Etsy in 2012**

Source: [Continuous deployment at Etsy](#)

How often do Etsy deploy code?

25+ times per day

Who can deploy code at Etsy?

EVERYONE

Automated tests

Fast and easy deployments

Constant monitoring

Continual bug fixing

**...and gradual role out of
features**

Case study 2: gov.uk

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This website replaces
Directgov **BUSINESS LINK**

50 million visits a month

**Several deployments a day,
thousands since launch**

Automated tests

Fast and easy deployments

Constant monitoring

...and smoke tests

Case study 3: FutureLearn

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700,000 learners

**Average of 3 deployments every
working day**

Automated tests

Fast and easy deployments

Constant monitoring

Continual QA and bug fixing

...beyond Etsy, gov.uk and
FutureLearn

Amazon

Google

Facebook

**Continuous delivery works well
with**

Automated tests

Fast and easy deployments

Constant monitoring

Continual bug fixing

**These are good practices for
EVERY project**

**Continuous delivery:
Reduce risk by delivering small
changes often and monitoring
feedback**

Questions?

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