

HOW TO INTRODUCE CONTINUOUS DELIVERY?

Alexander Schwartz
Nokia Location & Commerce

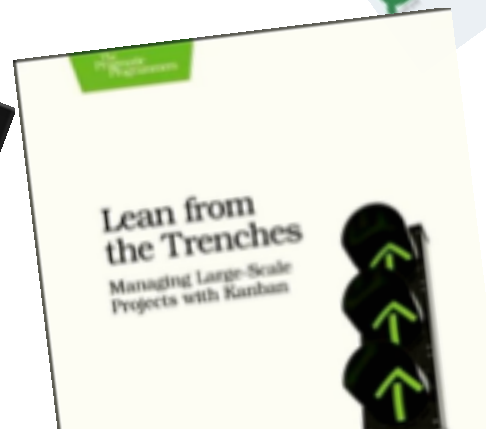
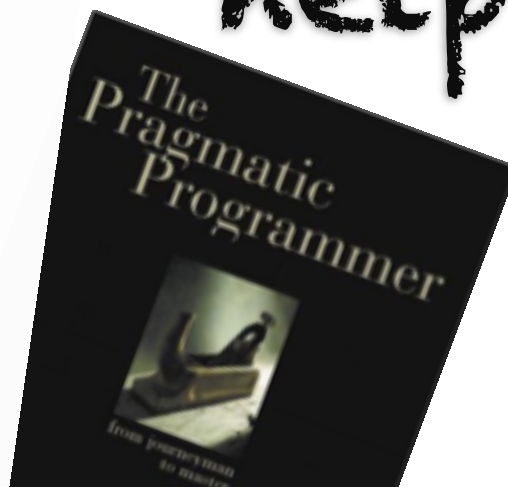
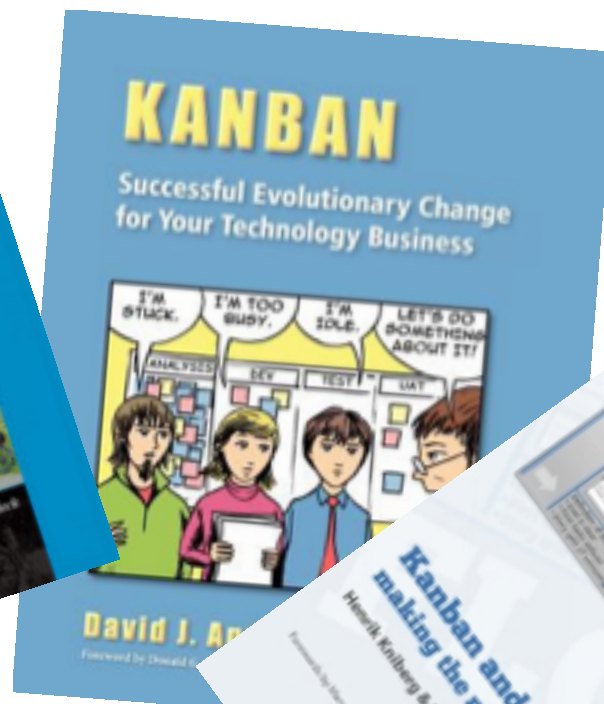
Which delivery style you have?

"Big ship"

"Kaiten Sushi"



How to do the transition?



What helps?

4 Stories:

What helps? What not?

Story #1

Story #2

Story #3

Story #4

context #1
NOKIA

context #2
another company

Story #1

Context: Nokia L&C Places RESTful services to show Place information on maps applications.

The screenshot displays the Nokia Maps web application. At the top, the Nokia logo is on the left, and navigation links for 'Maps', 'Pulse beta', 'Get Maps for your phone', 'Sign in / Register', 'Preferences', and 'Help' are on the right. A blue header bar contains a search bar with the text 'Search', and links for 'Directions' and 'Favorites'. The main content area is split into two panels. The left panel, with a dark background, displays the name 'Trifork A/S' in large white text, followed by 'Service', the address '4 Margrethepladsen Århus C, 8000, Denmark', and a 'Get Directions' link. Below this is a phone icon and the number '+4587328787', and a 'Report this place' link. The right panel shows a map of the area, with a red pin marking the location of Trifork A/S. The map includes street names like 'Ceres Alle', 'Aparken', 'Søren Frichs Vej', 'Hertzums Vej', 'Carl Blochs Gade', 'Bissensgade', 'Marstrandsgade', 'Aros Alle', and 'Vester'. Landmarks such as 'Scandinavian Congress' and 'Musikhuset Aarhus' are also visible. At the bottom of the page, there are five empty star icons, '0 Ratings', '0 Reviews', and '0 Photos'. In the bottom right corner, the text 'Source: De Gule Sider' and 'Places nearby' are visible.

NOKIA Maps Pulse beta Get Maps for your phone Sign in / Register Preferences Help

Search Directions Favorites

View on map

Trifork A/S

Service

4 Margrethepladsen
Århus C, 8000, Denmark

Get Directions

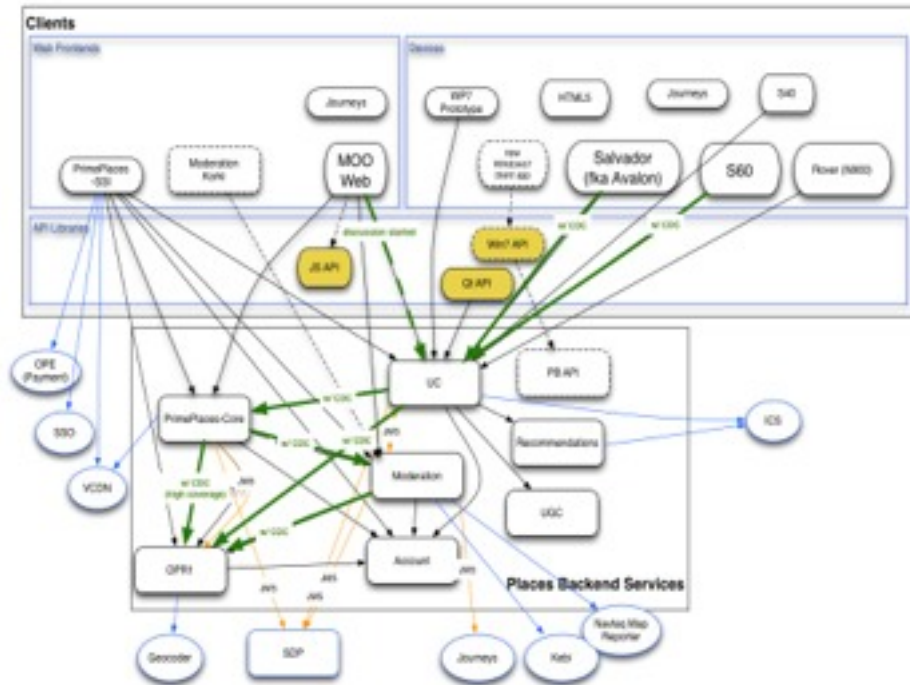
+4587328787

Report this place

Source: De Gule Sider

Places nearby

Story #1: The Initial Challenges

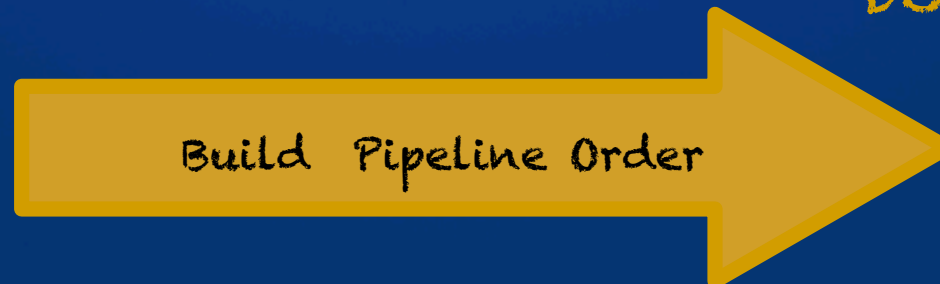
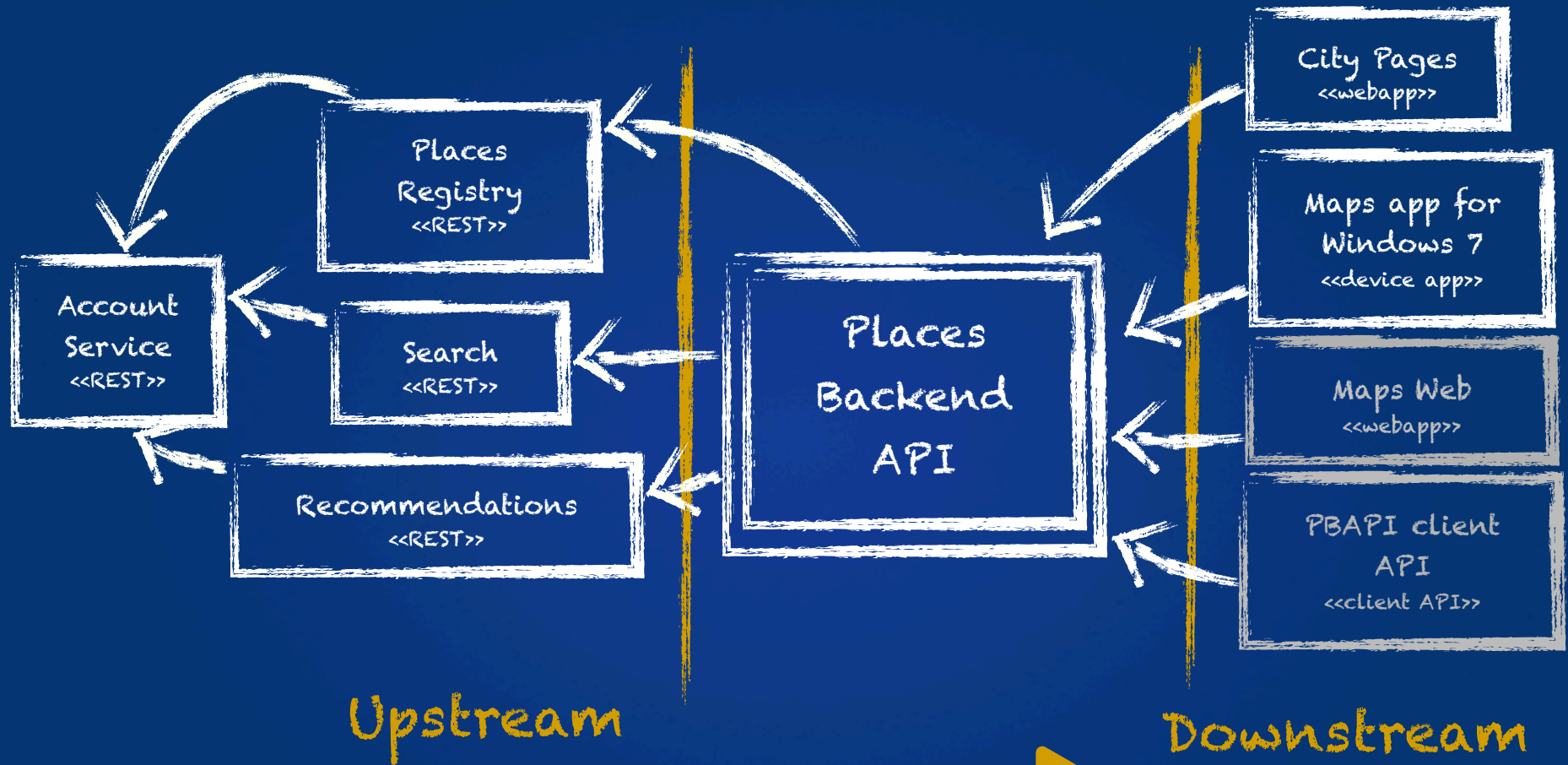


- complicated dependencies
- integration problems
- production bugs
- big bang releases

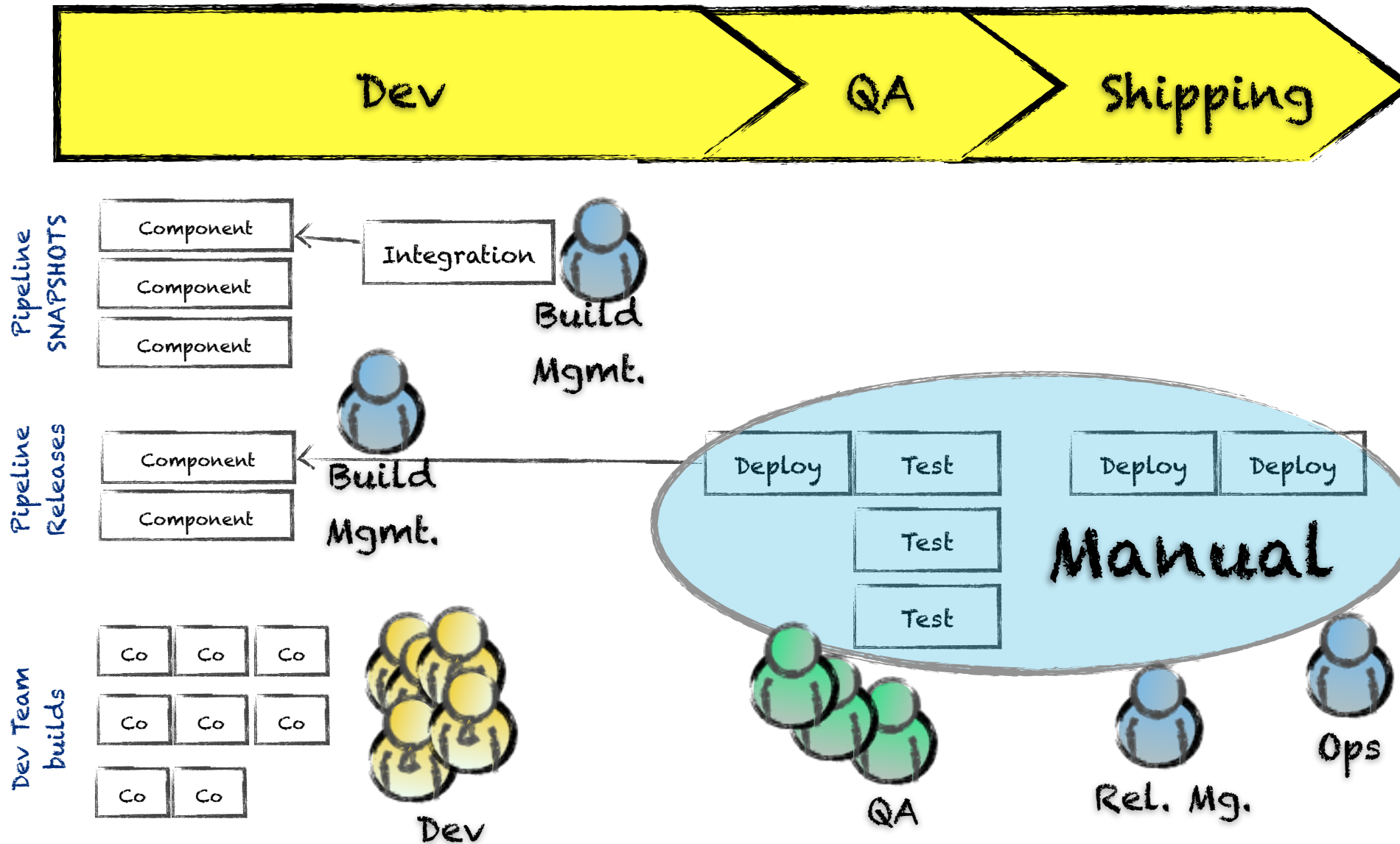
Approach: Ask for smart people for help.

- > Delivery Pipelines
- > CDCs (Consumer Driven Contracts)

From Services Dependencies to Pipelines



The Result After 1 Year



The Result After 1 Year

Developer buy-in
in the ideas

fair

Developer buy-in
in implementation

0 %

Improvement of
Cycle Time

none

Learnings

Bad:

- It was build by another team.
- It was build beside the teams builds.
- Big Bang Rollout
- no shared responsibility
- no proof that it works

Good:

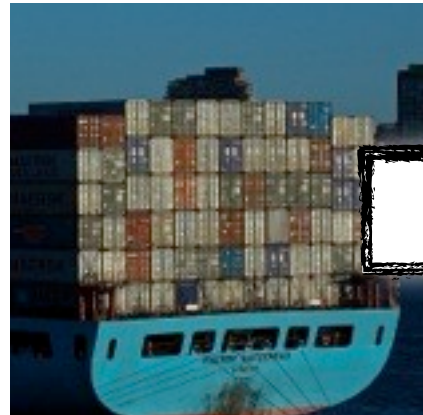
- it established a "we should do..."
 - CDCs
 - pipelines
 - deliver faster
- it fixed other problems: server config, etc.

Story #2

Context: Nokia L&C Places
RESTful services to show Place
information on maps
applications.

Focus on Delivering

What we achieved?



#Releases	5 in 6 month	>110 in 6 month
Cycle Time av.	approx. 35 days	11 days
Cycle Time min.	1 week	2 hours
Release Success	10 %	97 %
Unplanned Work	80 %	20 %

What helped...

DevQA

DevOps

TDD

Test Automation

Kanban

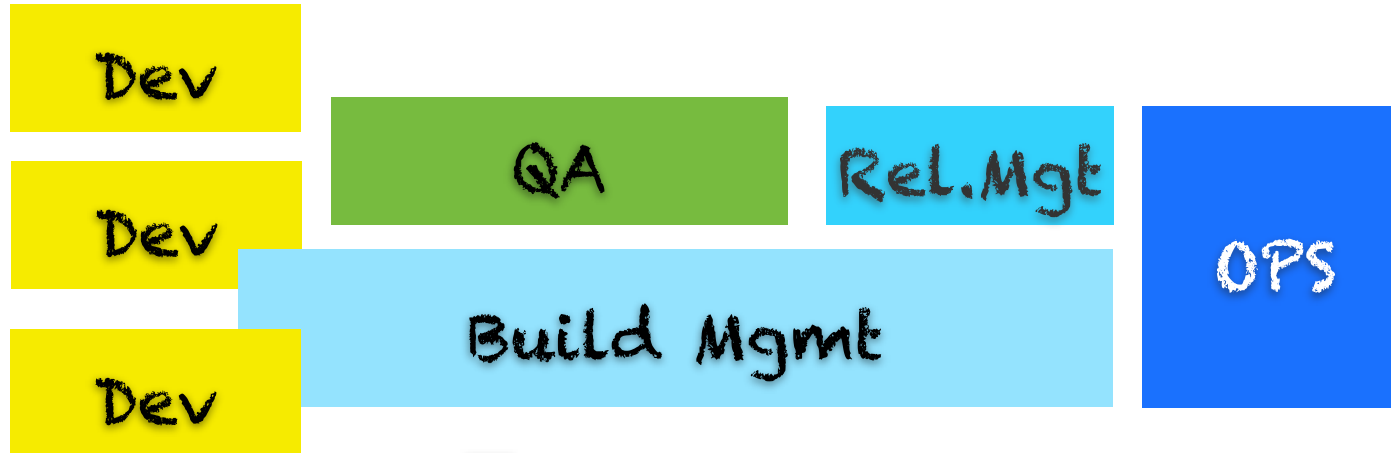
Trust

Pairing

People

Baby
Steps

Build one team



+



DevOps + DevQA



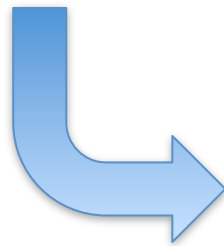
Dev



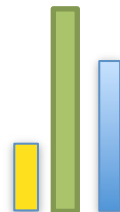
QA



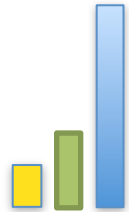
Ops



Dev



QA



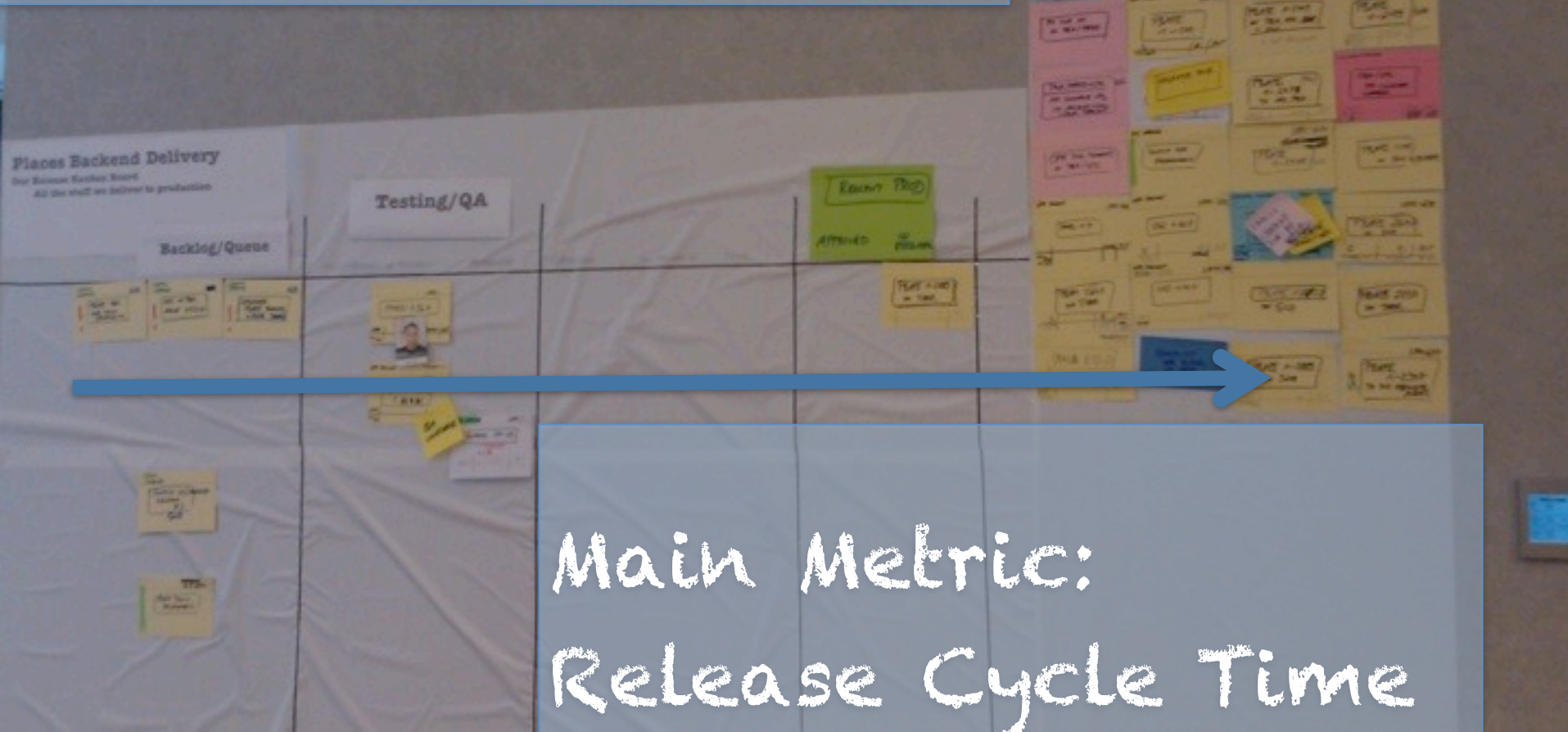
Ops

Focus process: Kanban

Focus process: Kanban



Focus on the value stream



Automation



Automating the wrong thing too early is dangerous

- Automate everything you do twice.
- Automation will be your rescue.

PIPELINES ENVIRONMENTS AGENTS PREFERENCES ADMIN

Pipelines » deploy-pbapi-thor-LHR-staging » 3253_2_LRFC731 | (Locked by 3253_2_LRFC731)

prepare verifyPrereqs deploy-server1 deploy-server2 verify

Run: 1 of 1 ■ Passed | Automatically triggered on 25 Apr, 2012 at 14:11:54 [+0200] Duration: 00:01:26 | [Compare](#)

Overview Pipeline Dependencies Materials Jobs Tests Config Graphs

UPSTREAM

Git
deployCode - f6ce18d

Pipeline
pbapi-deploy-spec
pbapi-deploy-spec/57/compile-deploy-spec/1
3253_2_LRFC731

CURRENT

deploy-pbapi-thor-LHR-staging
Label: 3253_2_LRFC731
■ ■ ■ ■ ■

DOWNSTREAM

deploy-pbapi-thor-LHR-2-production

Copyright © 2011 ThoughtWorks, Inc. Go

Our Automation:

Full E2E pipeline in one tool, from commit to prod

Eat your Own Dog Food

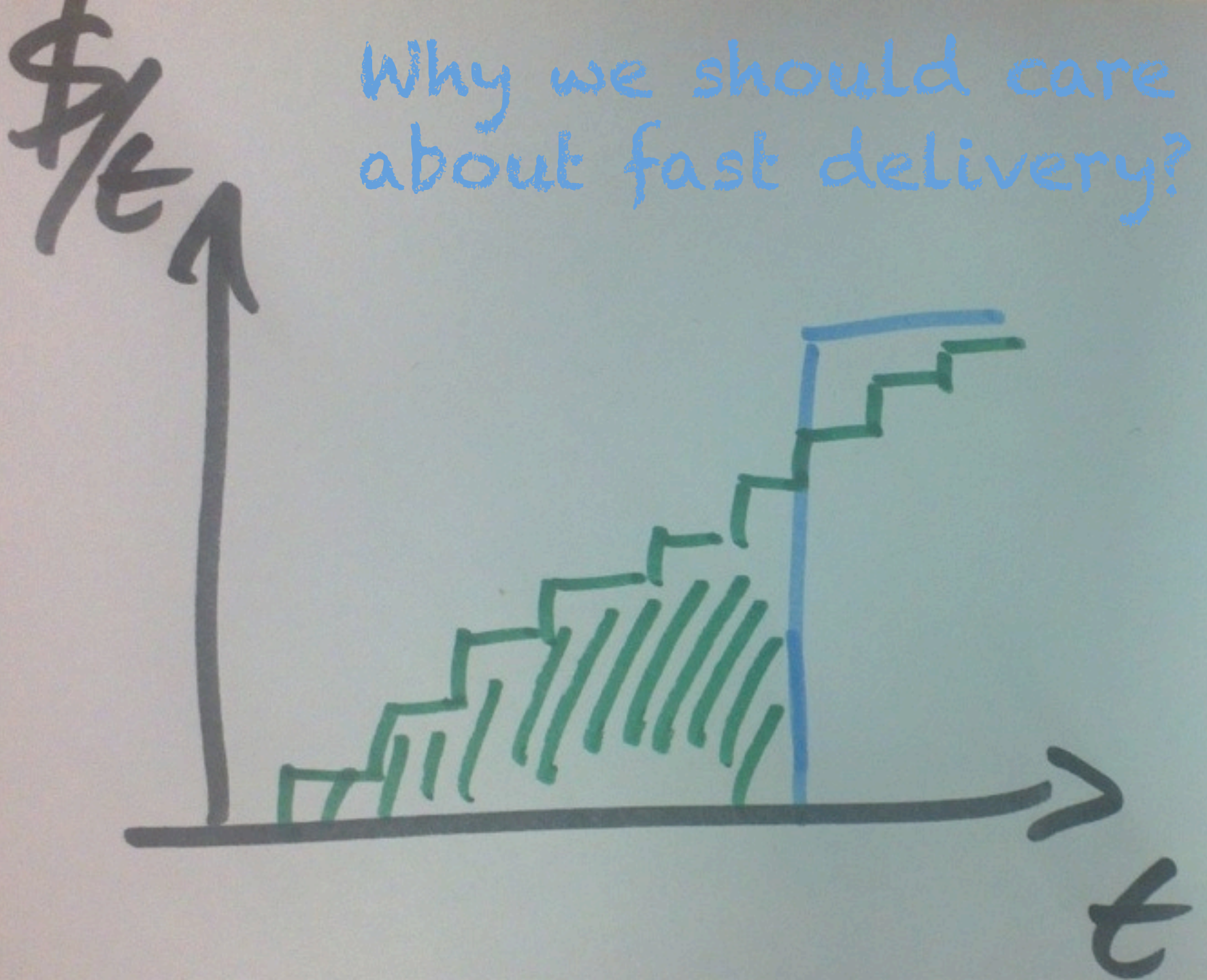
You understand the value of Continuous Delivery?

Use the same principle for your Improvement Process.

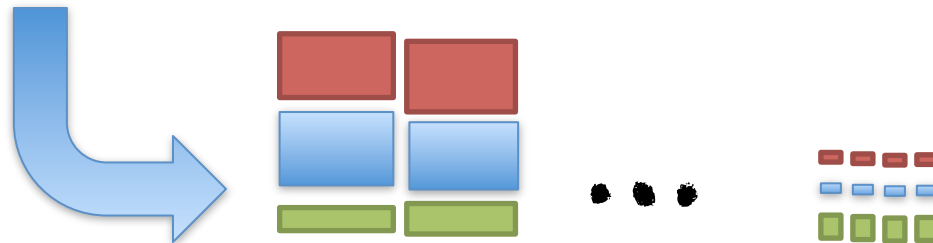
Baby Steps, Baby Steps, Baby Steps



Why we should care
about fast delivery?



How to find the balance + rhythm?



Story #3

Context: eBay company
biggest e-commerce market
place for vehicles in Germany

[Einloggen](#) | [Hilfe](#) | [Übersicht](#)  [Deutsch](#)

mobile.de Deutschlands größter Fahrzeugmarkt

[SUCHEN](#) [ANBIETEN](#) [SUCHEN](#) [ANBIETEN](#) [INFORMIEREN](#) [MEIN MOBILE.DE](#) [HÄNDLER](#)

☐ Nur Neuwagen anzeigen

Marke

Beliebig

Modell

Preis bis

Beliebig

Erstzulassung ab

Beliebig

Kilometer bis

Beliebig

Kraftstoffart

Beliebig




PLZ

Umkreis

Kein

[Detailsuche](#)


[Treffer anzeigen](#)



WELCHER IST DEIN NÄCHSTER?

Autos, Motorräder, Wohnmobile
jetzt mit Ihrem Android-Smartphone finden.

[Mehr erfahren](#)



Aktuell inserierte Fahrzeuge



Opel
12.940 EUR

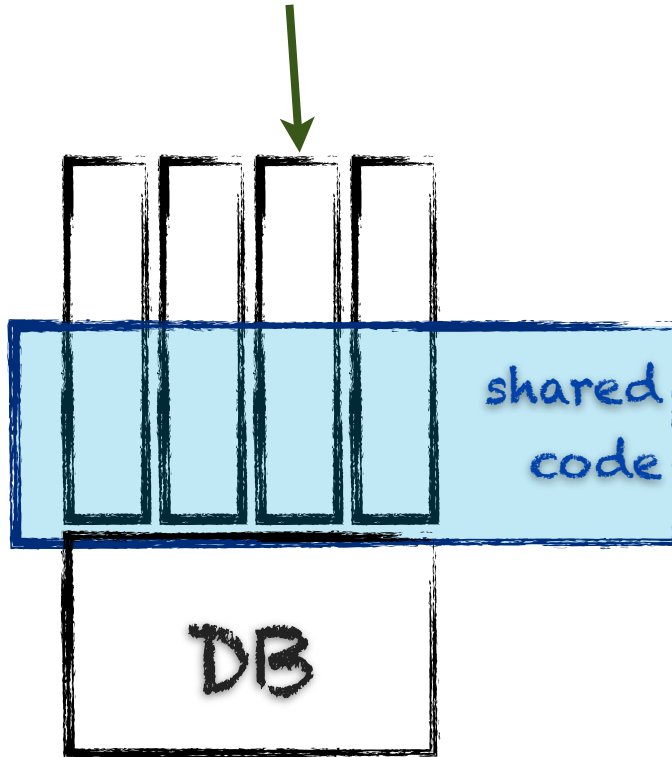
Ratgeber Motorrad-Kauf



JETZT NEU!

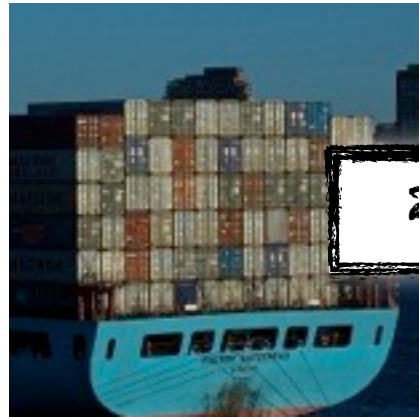
The Architecture

web app for a single use case, e.g. "search"



- eBay "pillar architecture"
(every major use case is separate)
- a lot of shared code
- big domain model
- typical change:
 - impacts one component
 - the domain model
 - full rollout
- big bang rollouts, no downtime
- deployment army

What we achieved?



#Releases	every 2-3 weeks	every week
Cycle Time av.	10-30 days	30 days
Cycle Time min.	30 days	10 days
External quality	room for improvement	room for improvement

Story #4

Context: eBay company
biggest e-commerce market
place for vehicles in Germany

Why don't just skip
the hardening phase?

What we achieved?



#Releases	every 2-3 weeks	4-8 per week
Cycle Time av.	10-30 days	1-5 days
Cycle Time min.	30 days	2 hours
External quality	room for improvement	pretty good

What helped....

~~Baby
Steps~~

Kanban

Test Automation

A huge step

- make the right thing easy
- share responsibility
- cross-functional teams

4 Stories:

What helps? What not?

Story #1

Story #2

Story #3

Story #4

~~Huge Step~~

Baby Steps

~~Baby Steps~~

Huge Step

Continuous
Improvement

Disruptive
Change

Questions?



Alexander Schwartz

twitter: @alexschwartzbln

e-mail: alexander.schwartz@nokia.com