



ING's agile journey

Henk Kolk







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ING's agile journey

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2009 Beliefs





Starting position

IT is a commodity

Everyone can do IT

Internal customers

IT is a cost center

Quality through process adherence

Lots of manual work & handovers

Multiple sourcing partners

Scattered IT landscape

Non-functionals provided by infra

Journey to agility at scale

Start of our own
Java community

Engineering culture

May 2010 Google

Start full automation of IT processes

Continuous Delivery -Jez Humble & Dave Farley

May 2011

Full reorganization i.e. 180 full DevOps teams

Engineers hunger to take responsibility

May 2013

Complete

reorganization – 400 BusDevOps squads

goto:

Supported by engineering platforms

July 2015

Oct 2009

New IT Mgt team

The will to change

Oct 2010

Start of Mobile app development

1st Scrum team and start agile development

Nov 2011

Discussion – who runs production

Clear demarcation responsibilities infra and applications

Sep 2014

Need full automation infra & scalable systems

Build private cloud



Journey based on 4 ideas





Continuous
Delivery in all
our teams



Partners are welcome, outsourcing not preferred



Nothing beats engineering talent



We distinguish by building great software

Change legacy beliefs



From

- "IT enables the commercial strategy"
- "IT is a cost center"
- "Outsourcing for the lowest price"
- "Buy before build"
- "Projects to drive change"

To

"IT drives the commercial strategy"

"IT is a value driver"

"Hiring the best talent"

"Building as the way to understanding"

"Line drives the change"













Quality of its Engineers



A tale of two bubbles





Software Engineering Industry







Re-birth of the Master Builder

Henk Kolk

ING's People strategy



Expert

Proficient

Competent

Advanced Beginner

Novice



Origins of "Architect"



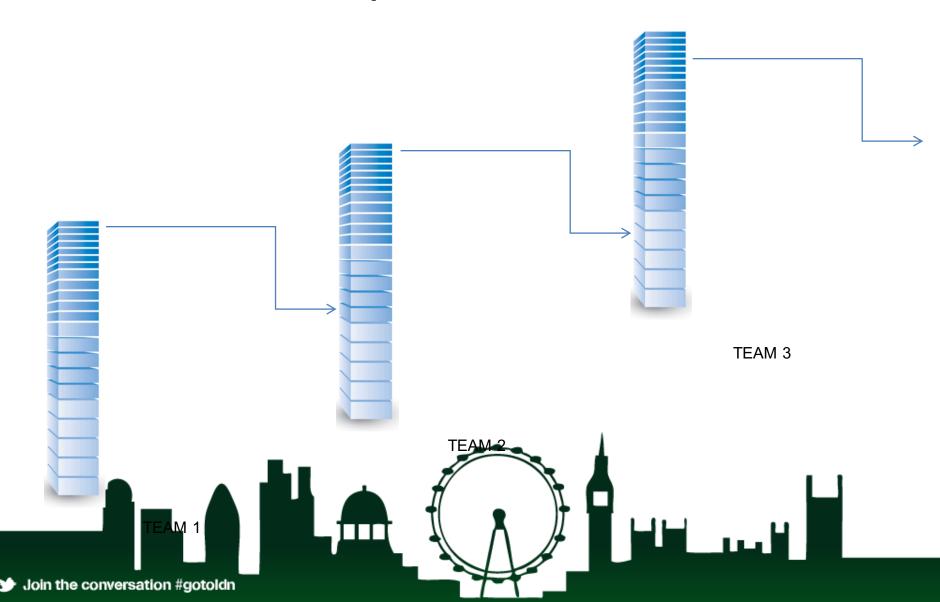
(Wiki) Etymologically, architect derives from the Latin architectus, which derives from the Greek (arkhi-, chief + tekton, builder), i.e., chief builder. (...)

Throughout ancient and medieval history, most architectural design and construction was carried out by artisans – such as stone masons and carpenters, rising to the role of master builder



But there is a problem ...



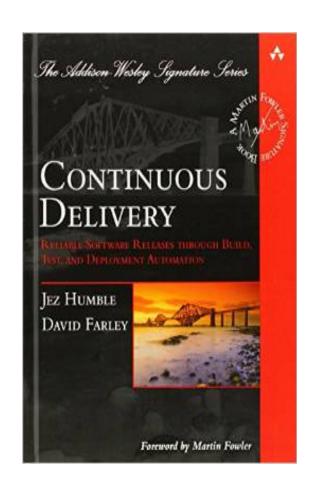


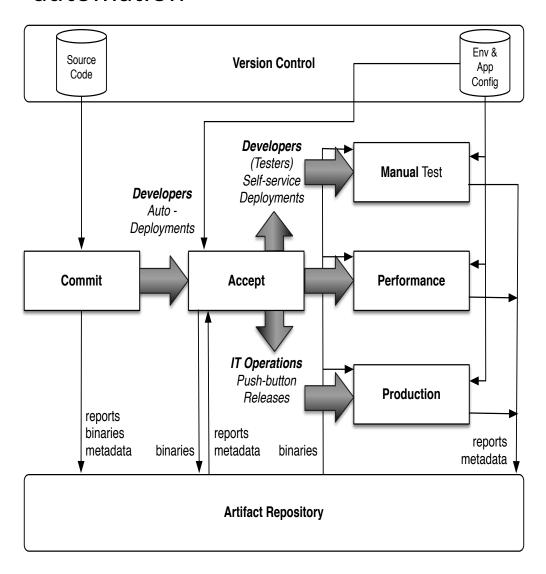


Shared engineering platforms



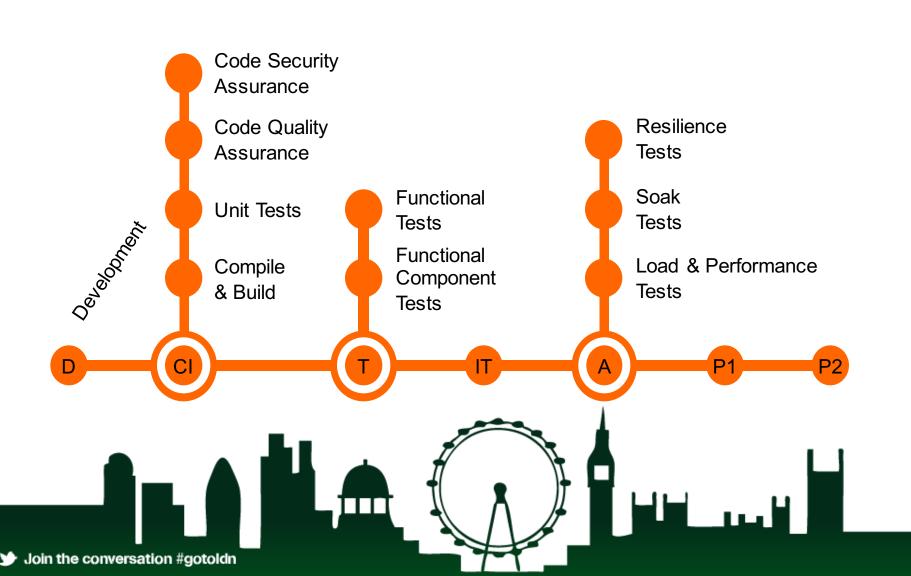
"Continuous Delivery" improves the reliability of software through automation





Continuous Delivery





Data platform



Big

- Hadoop
- DWH RDBMS

Fast

- Akka
- Scala
- Spray
- Spark
- Cassandra

- Distributed computing and storage
- Open Source based
- Near Realtime + Big Data

Spray

Cassandra

Hadoop

Akka, Kafka



tomers Billions of messages



API Platform





Technologies being used

- Java, Scala (JVM based languages)
- JAX-RS
- RX
- Hystrix
- Apache Cassandra
- Nginx
- Apache ZooKeeper
- Apache Curator
- Ribbon
- Docker
- Mesos



Everybody

is

a Designer

Ron Kersic





Design, like you give a damn!

Flavia Sequira





Platform squads "We are here to make other squads Awesome!"





Be AWESOME









Thanks!

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