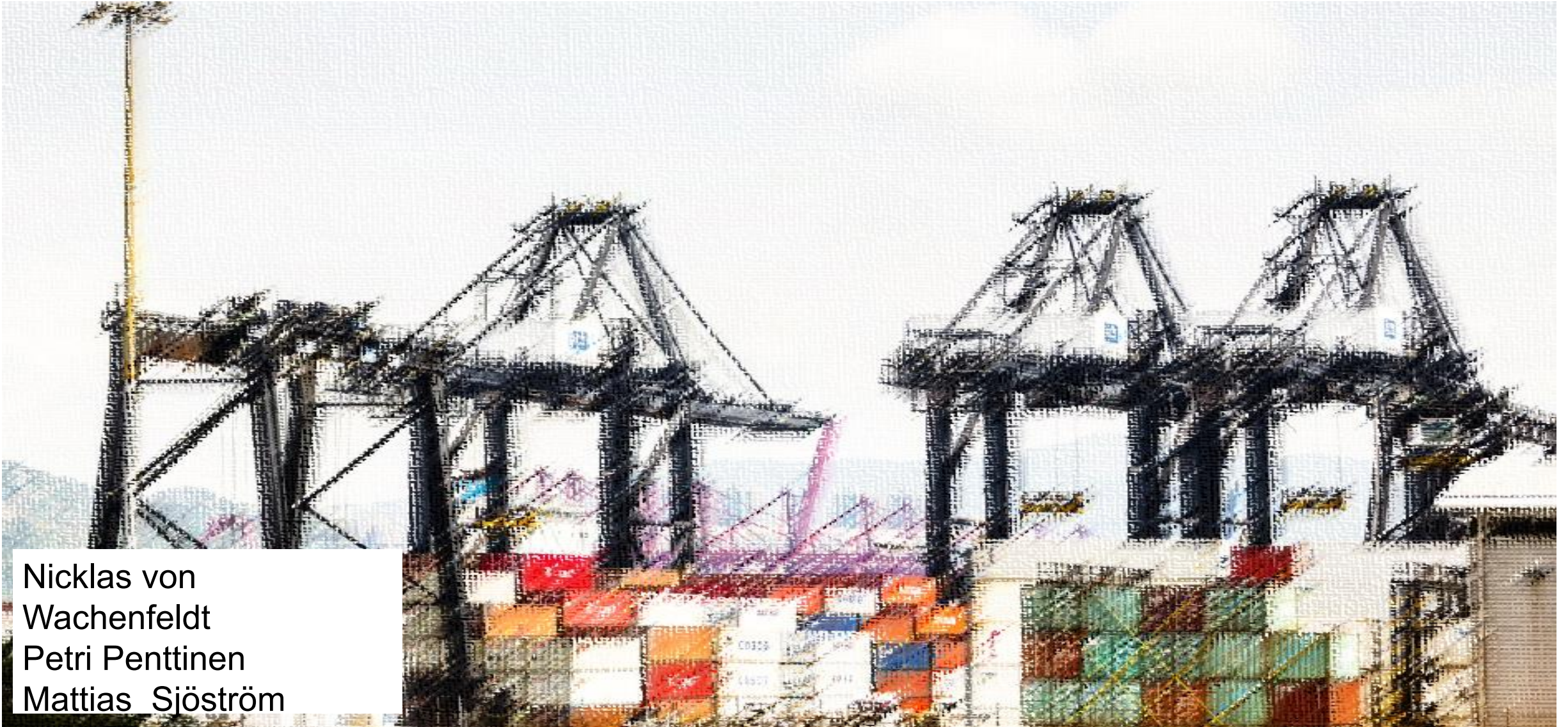# SEBShift!

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Mattias Sjöström
Hampus Wingren

SEB

SEB at a glance

#1

- Nordic Large Corporates & Institutions
- FX Nordic currencies
- Nordic payments
- Corporate card issuer in the Nordics

3,000	Corporate & Institutions	**2/3**	Corporate credit exposure	**219**	Branch offices
274,000	SMEs*	**>20**	Countries	**97%**	Digital interactions
1.4m	Private individuals*	**15,000**	Employees	**24/7**	Telephone services

* Home bank

Drivers

SEB

Shorter feedback loops
Faster time to market

More flexibility
Ability to adapt to change

SEB SHIFT

Decreased complexity
Decouple the monolith

Architectural control
Set target architecture

Attractive place to work
Possibility to recruit

Container Application Platform-as-a-Service

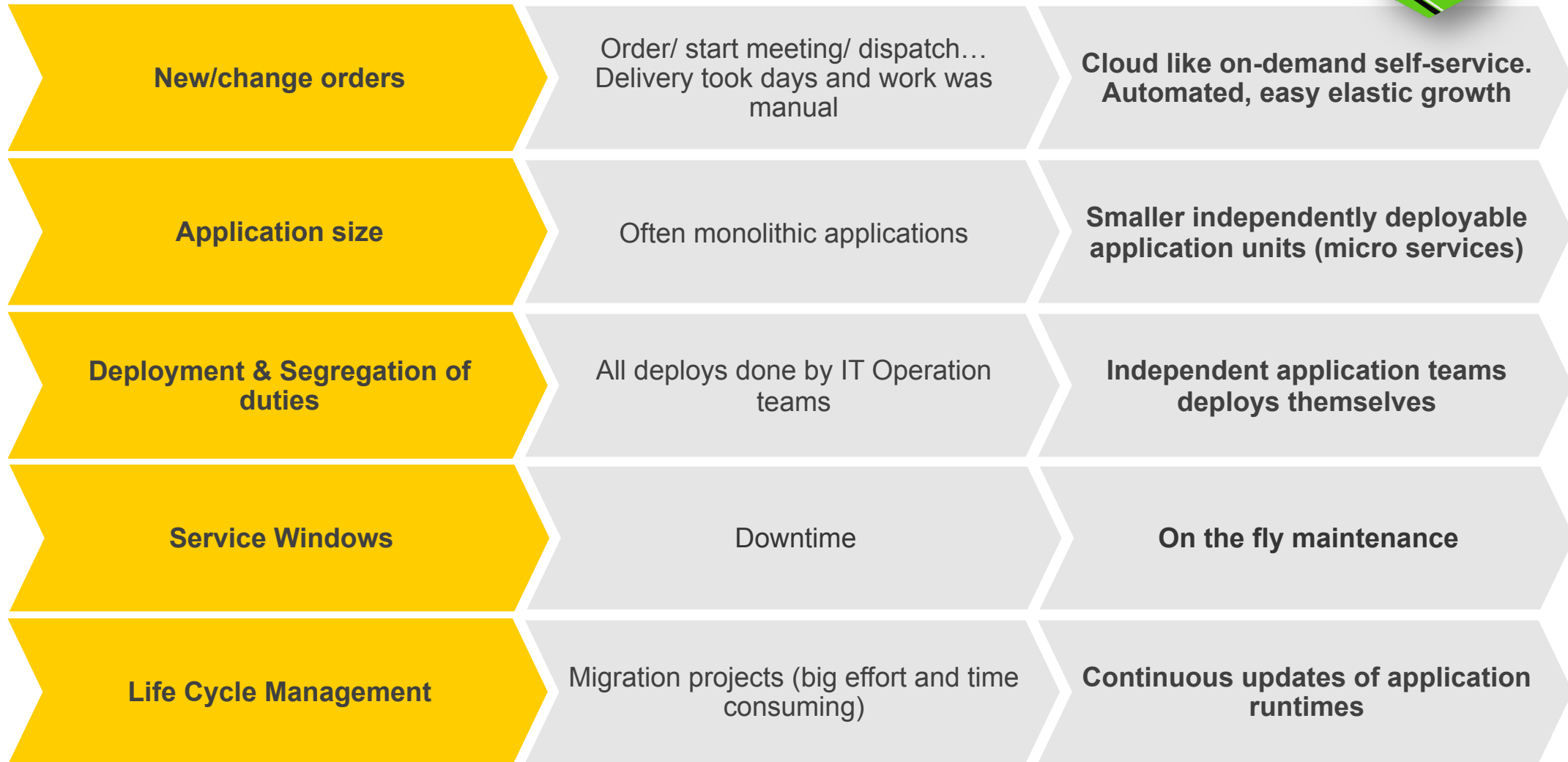**SEBShift team** supporting with way of working and tools for DevOps and Continuous Delivery pipelines

Prerequisites

?

Ambition

Application team

On boarding

Selfservice

Continuous Delivery

Container Hosting

Maintenance
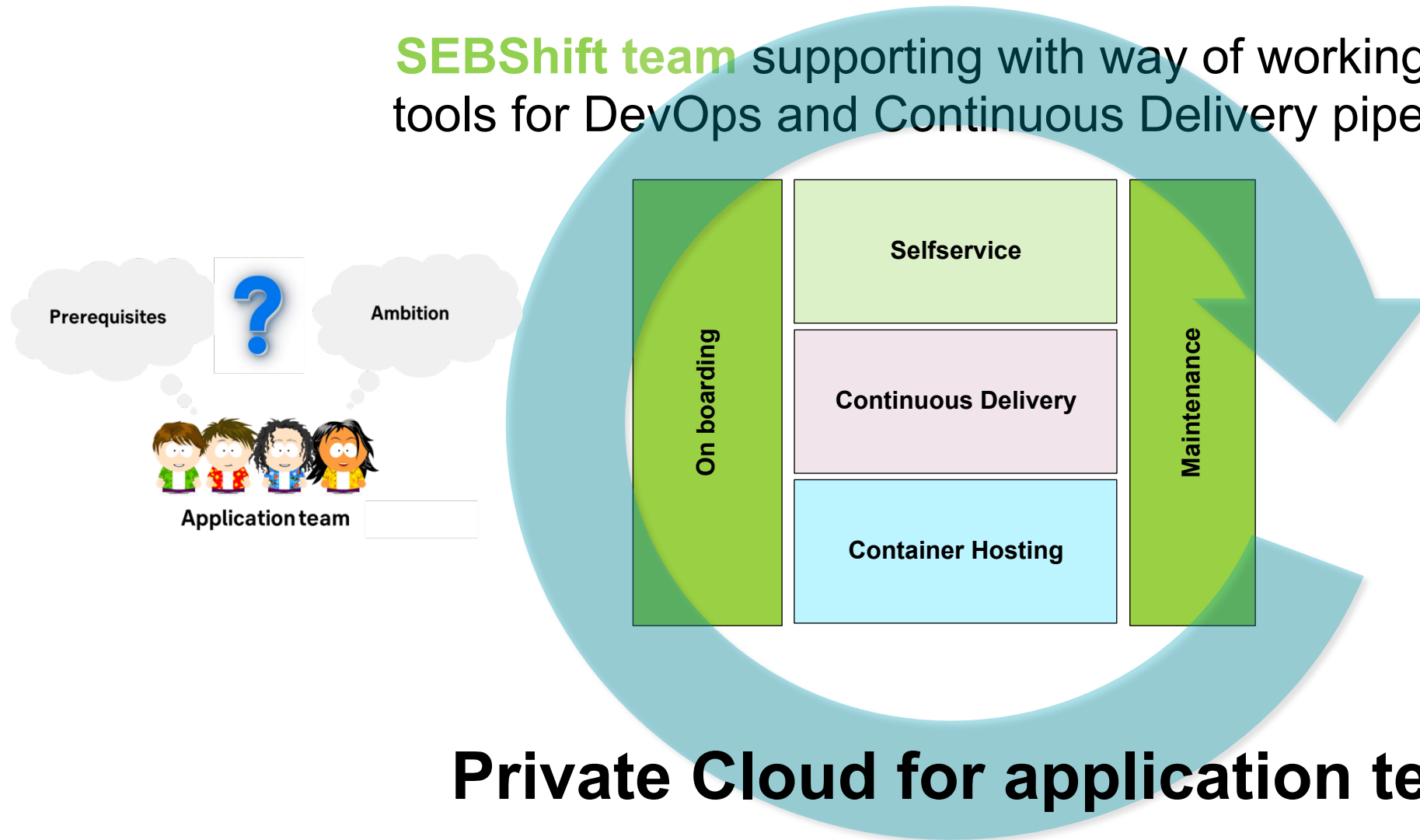
Private Cloud for application teams

The Shift

SEB

	Before	**Now**
New/change orders	Order/ start meeting/ dispatch… Delivery took days and work was manual	**Cloud like on-demand self-service. Automated, easy elastic growth**
Application size	Often monolithic applications	**Smaller independently deployable application units (micro services)**
Deployment & Segregation of duties	All deploys done by IT Operation teams	**Independent application teams deploys themselves**
Service Windows	Downtime	**On the fly maintenance**
Life Cycle Management	Migration projects (big effort and time consuming)	**Continuous updates of application runtimes**

Automated Continuous Delivery pipeline

Cleanup	Checkout	Build/Test	Sonar Analysis	Quality Gate	Build/Deploy Image	E2E API Tests	Deploy Artifacts	Promote to STAGE
2s	6s	5min 14s	1min 30s	1min 0s	1min 40s	3min 45s	1min 7s	4min 39s
820ms	6s	4min 46s	1min 19s	1min 0s	1min 4s	22min 0s	55s	3min 54s

Declarative: Checkout SCM	Checkout	Run smoke tests	Cucumber Reporting	Promote to analytics-prod	Create SPM ticket
8s	2s	53s	1s	1s	10s
9s	2s	45s	1s	1s	10s

GoLive

Delivery team can adopt fast to changes

SEB

Notifications

2017 NotHub Traffic
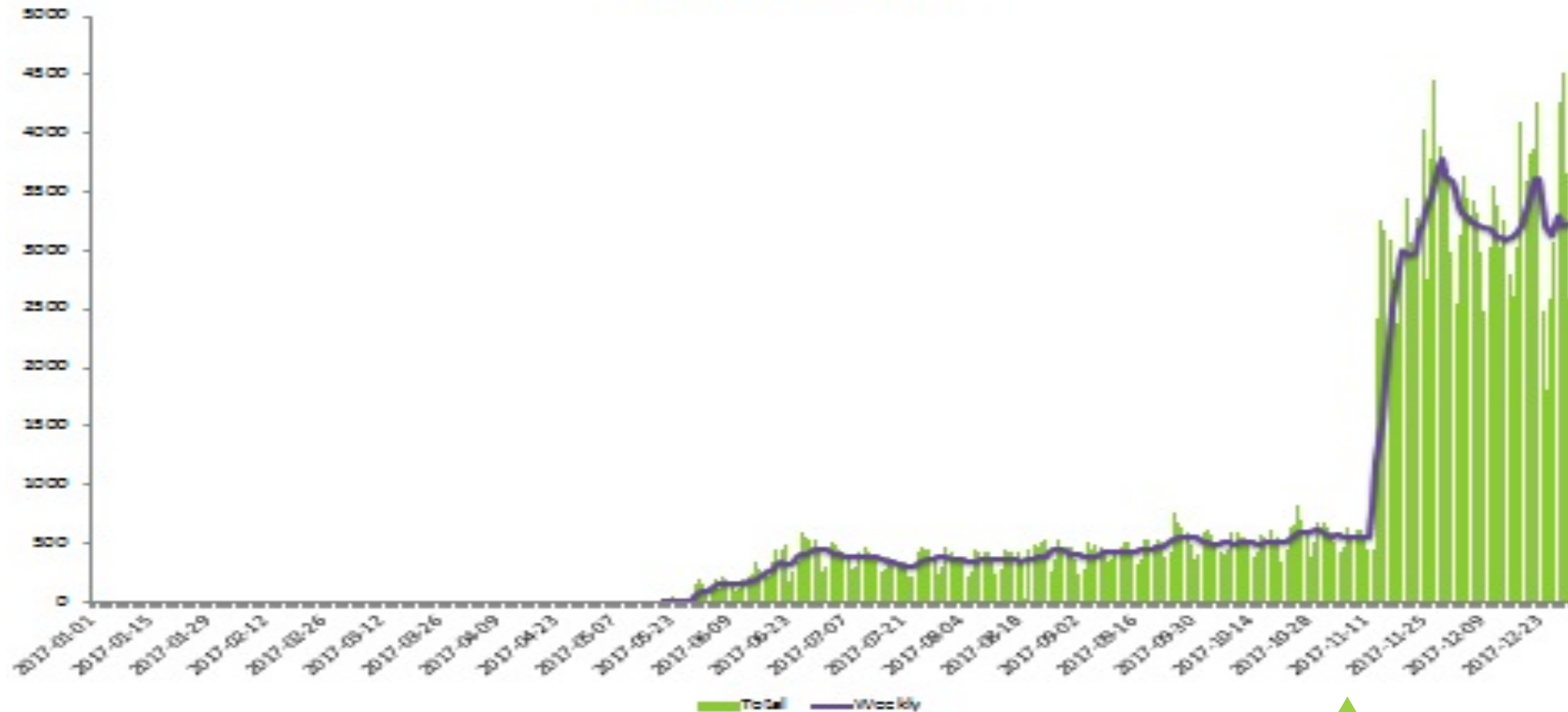
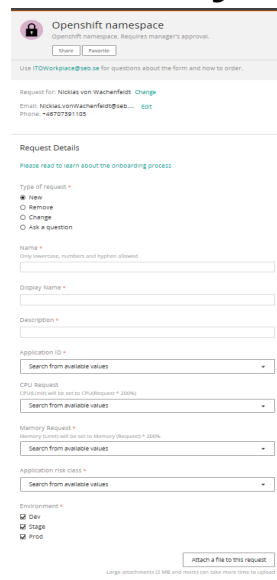Demand to add new notiication event types

Onboarding of the....
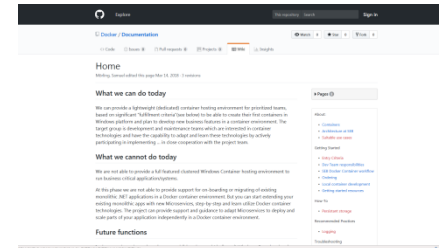

Confluence
How to, guide lines and best practices

Github
Code & templates

Learning

SEBShift
Dev+Ops
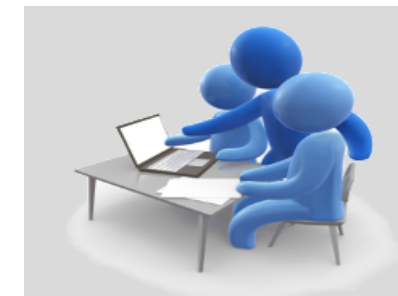

Order MyIT

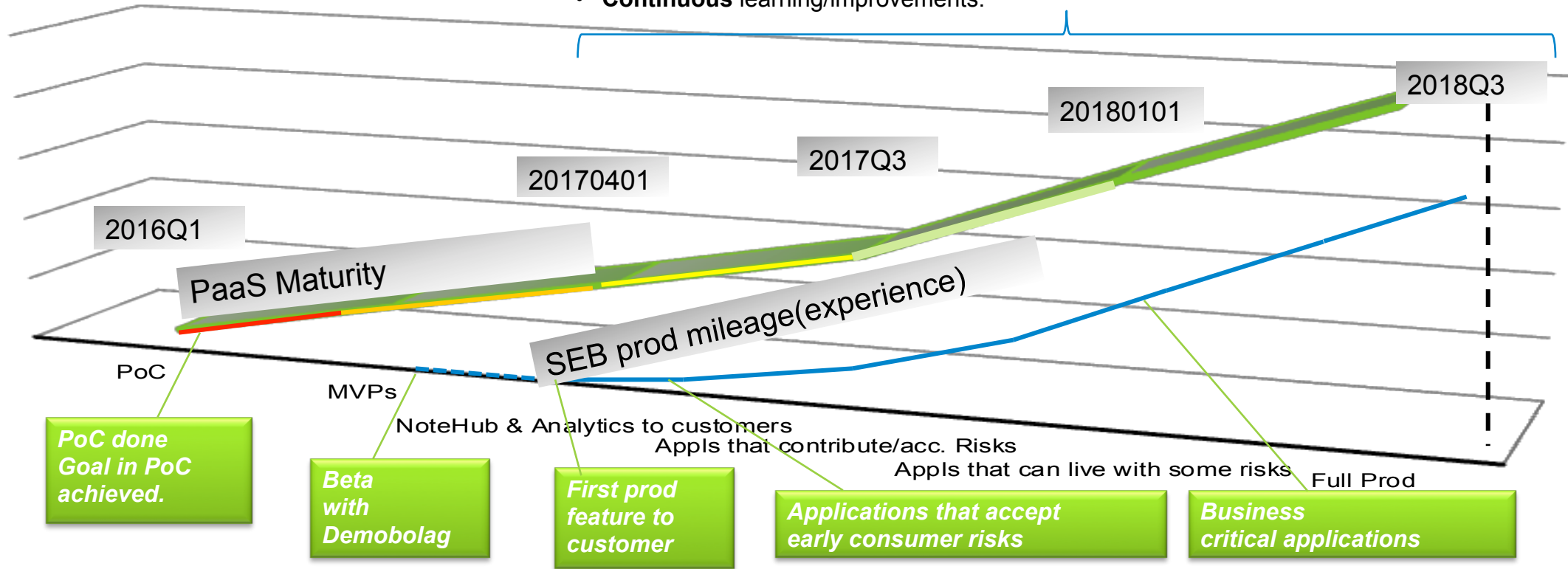**Delivery teams**

SEB Overflow

Training

SEB
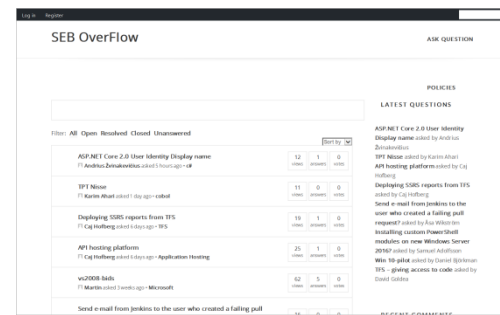
Continuous PaaS improvements
MVP, version 1.0, version 1.1, version 1.2…

- **Stepwise** scale up, taking in consideration application requirements and risk tolerance.
- **Continuous** learning/improvements.

2018Q3

20180101

2017Q3

20170401

2016Q1

PaaS Maturity

SEB prod mileage(experience)

PoC

MVPs

NoteHub & Analytics to customers

Appls that contribute/acc. Risks

Appls that can live with some risks

Full Prod

PoC done Goal in PoC achieved.

Beta with Demobolag

First prod feature to customer

Applications that accept early consumer risks

Business critical applications

SEB

Status & Effects seen so far

SEB

First 100 applications addressed:

- In production: 26
- Running tests: 44
- Getting started: 30

Speed

✓ Faster turn-around times for deployments

✓ Self service (easy provisioning & scale up)

Speed/ cost saving

✓ Deployments by independent application teams

✓ Isolated services have decreased the test scope

✓ Spaces consolidated to clusters

✓ Open Source application run-times

QA

✓ Increasement of Automated tests
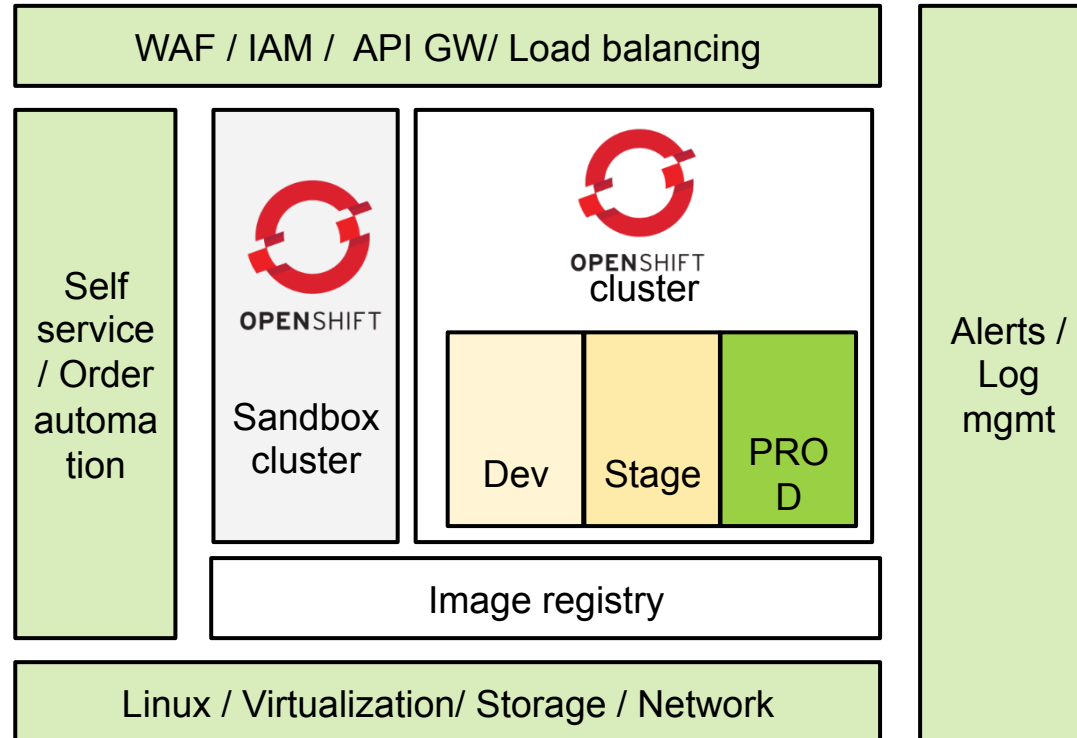
✓ Sec test starting to be part in CD pipelines

Up-time

✓The platform is upgraded on the fly (daytime)

More fun

Infrastructure on a high level

Shift reflections and challenges

SEB

DEV/OPS	New tech is hard to learn but new way of working and mindset change is even harder
RACI	Our delivery teams are offered opportunities to deliver faster, more often and use new technology but also need to take on more responsibility
COTS	Lack of standards/ support from vendors
UNMATURE	Persistent Storage, Sec, EFK&Upgrades
FULL STACK SELF-SEVICE	Still separate orders for surrounding Infra

OPENSHIFT

Continuous improvement

Moving forward…. What's next ?

SEB

- Infrastructure As A Service

    - More selfservice: Provisioning servers, FW-rules, DNS, DBs etc
    - Hybrid cloud

- Public Images

- Mindset

- Continue shifting common (language specific) libraries to infrastructure

    - Istio

Demo