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Mariya Mladenova / Zalando
Platform Design and Migration in the Real World





Agenda



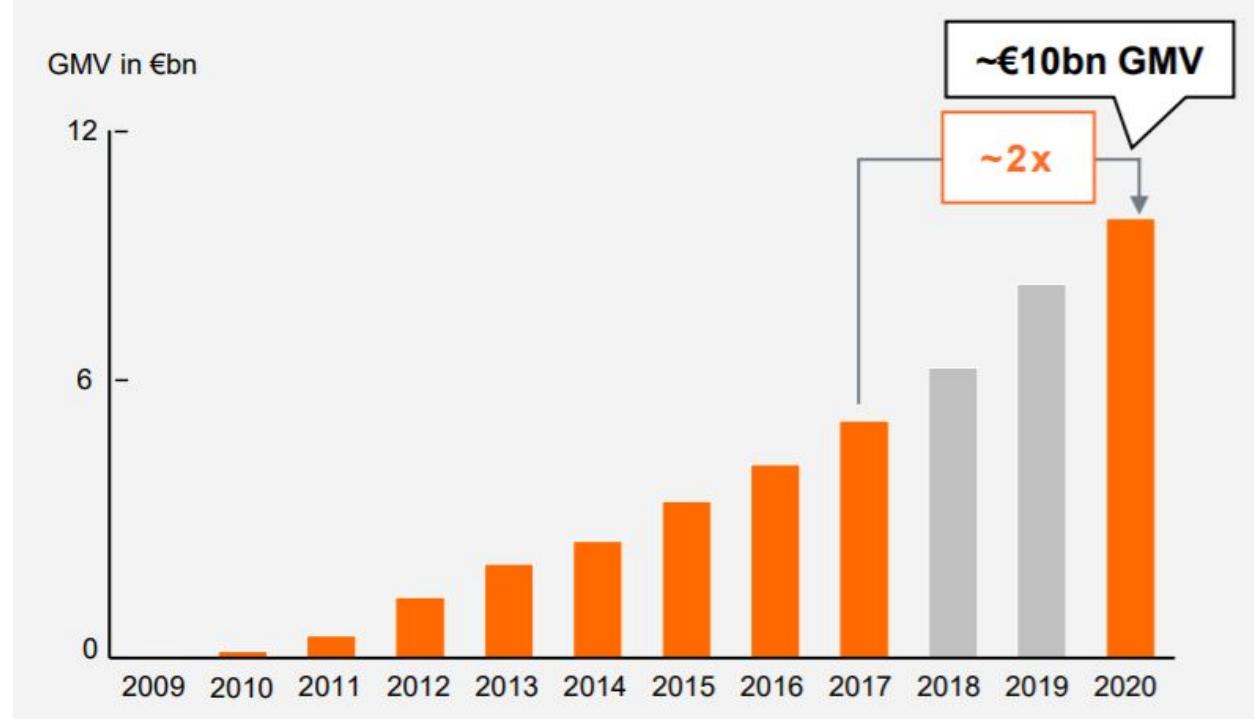
- 1. *Triggers for change*
- 2. *Platform Design: Goals and Methodology*
- 3. *Migration Journey*
- 4. *Facing Reality*
- 5. *Wrap-up and Q&A*



Triggers for change



Zalando

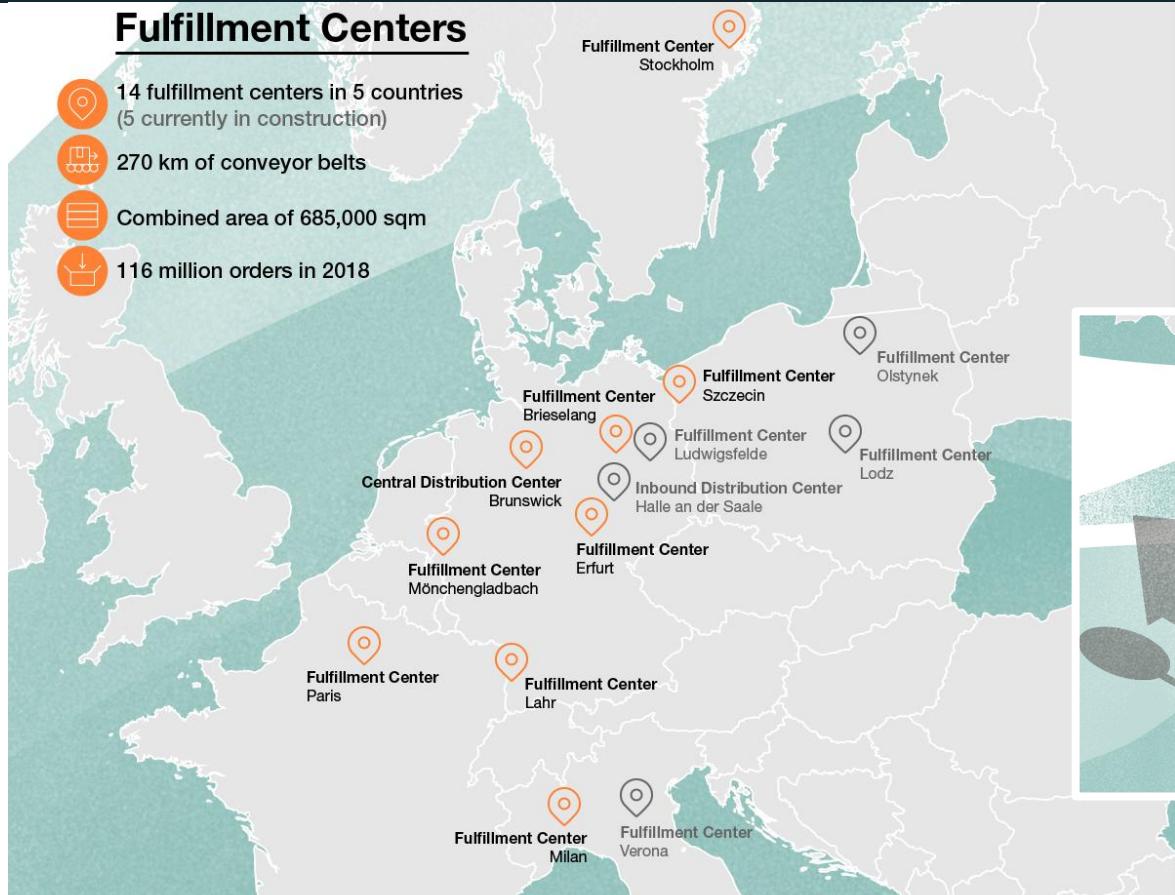


We constantly adjust our strategy to take our customer proposition to the next level



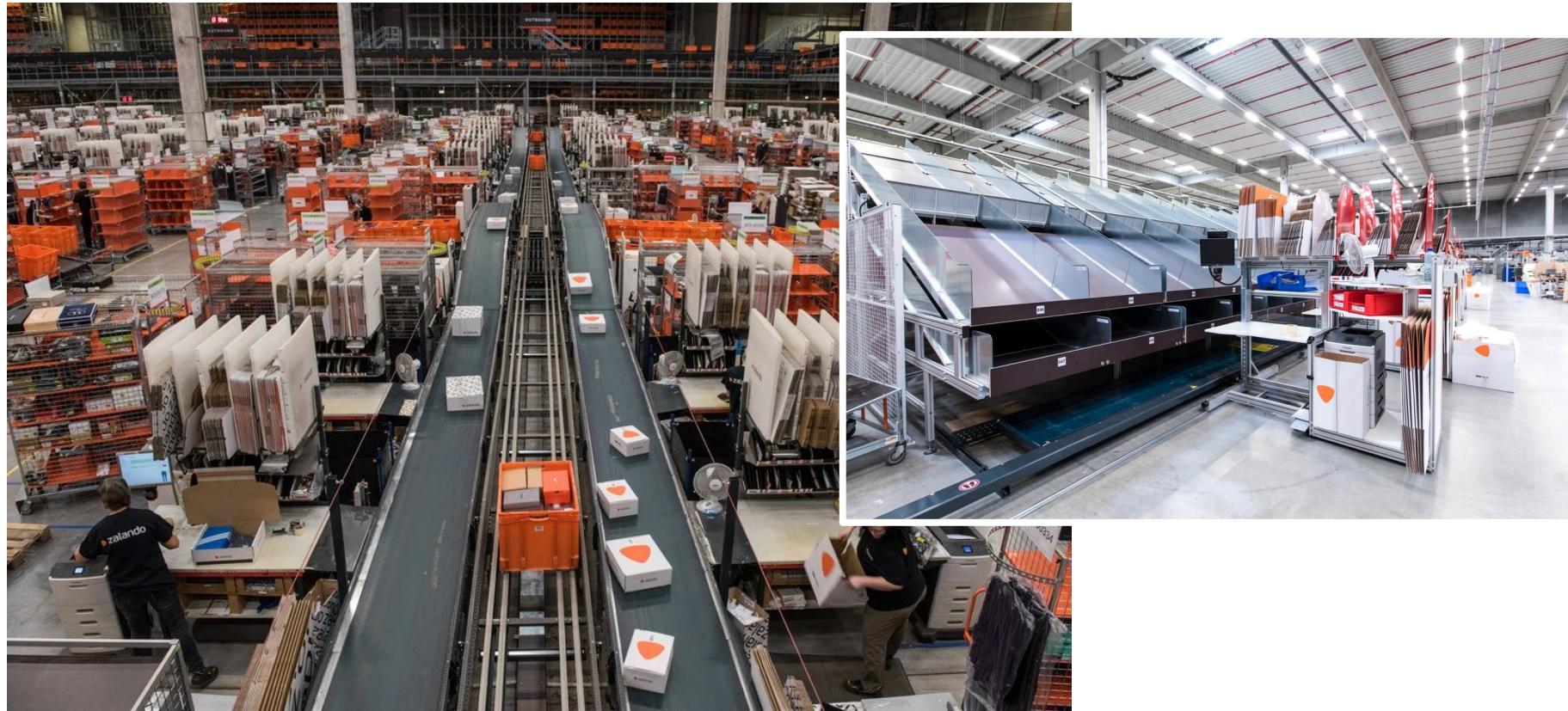
Fulfillment Centers

-  14 fulfillment centers in 5 countries
(5 currently in construction)
-  270 km of conveyor belts
-  Combined area of 685,000 sqm
-  116 million orders in 2018



Order & Delivery

- 60 delivery and return options 
- More than 20 payment options 
- Record delivery time: 25 minutes 







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Triggers for change



Monolith to
Microservices

Maintainability

Scalability

Efficiency

*Split of team
responsibility*

DevOps Support

*Ease of technology
experimentation*

Fault Tolerance

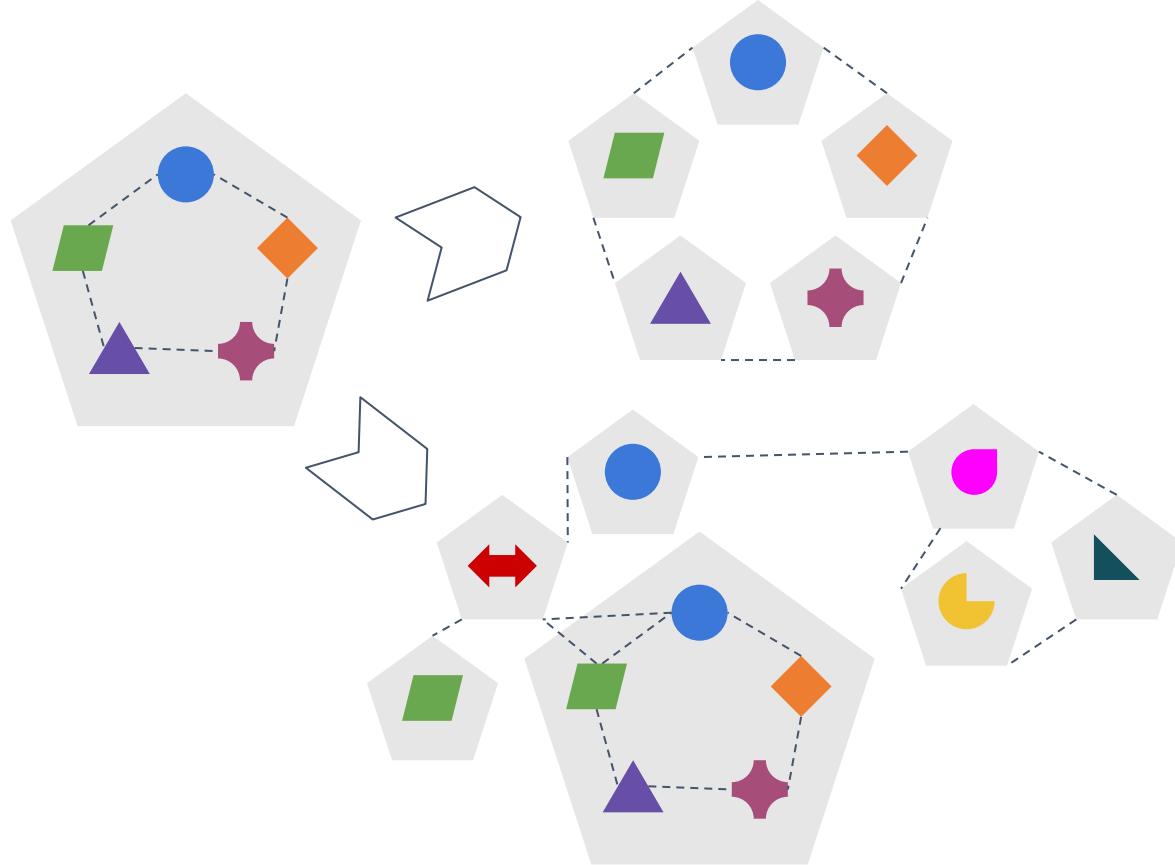
*Because everyone
else is doing it**



Triggers for change



Monolith to
Microservices



“In an industry where new technologies rapidly gain market traction, the pure organizational cost of maintaining and attempting to improve a cumbersome monolithic application is simply not practical.”

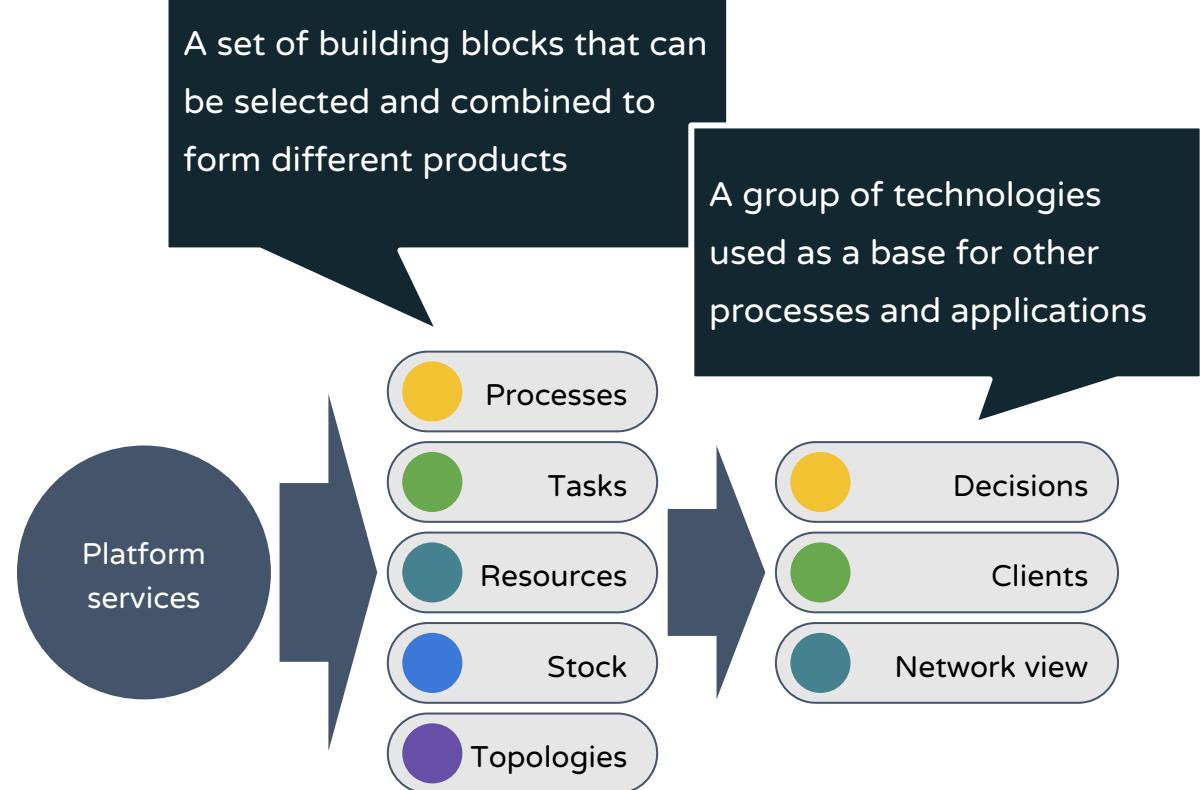
Susan Fowler



Triggers for change



Platformization





Platform Design



Goals and
Methodology

Step 1

Capabilities

Step 2

Processes
Applications
Interfaces

Technical Requirements



Current	Industry standard	Additional
---------	-------------------	------------

Current	Planned	Desired
---------	---------	---------



Executors, Decisions, Network



Platform Design



Goals and
Methodology

Step 3

Domain
Objects

Tasks (Inbound/Outbound)
Inventory/Stock
Processes
Resources and Workforce
Physical Layout



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Migration Journey



Business
Justification



exponential growth and
complexity



gaps or instabilities in
current implementation



Migration Journey



Common
Issues

*Monolith
Decoupling*

*Communication
among Services*

*DevOps infrastructure
requires effort*

*Expected long-term ROI**

*Database Migration
and Data Splitting*

Effort Estimation

Library conversion effort

People's minds



Migration Journey



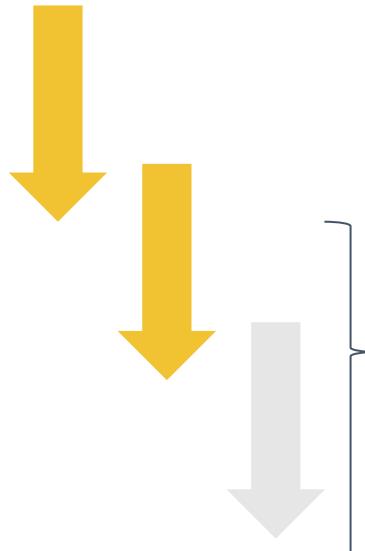
Migration
Steps

Planning a full migration

New Features and Services

Features and Services for Optimization

Migration of Functionality





Facing Reality



Microservice
Architecture
Trade-offs

Conway's Law

Technical Sprawl

*Ability of Systems
to Fail*

*Competitiveness
for Engineering
and Infrastructure
Resources*



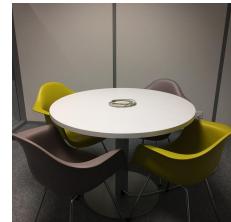
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Facing Reality



Things
we did well

NOT
COOL





Facing Reality



Lessons
Learnt & Future



small
steps first

optimism
bias

know
yourself



still at the
start

inspire
the
business

Wrap-Up



Contact me @:
<https://www.linkedin.com/in/mvlml/>
mariya.mladenova@zalando.de



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Thanks for your attention!