




How we sped up delivery using feature branches

Agilia Conference 2018
Jan Vilímek, Platform Architect
Oriflame Software



AGENDA

- About Oriflame
- Complexity we face
- Challenges we had when we were growing
- How to get effectivity and flexibility back?
- Take away

BUT FIRST.. A FEW QUESTIONS FOR YOU..

Do you use agile for
developing software?

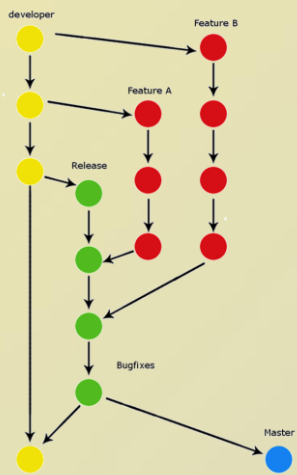




Which **source control** do
you use?

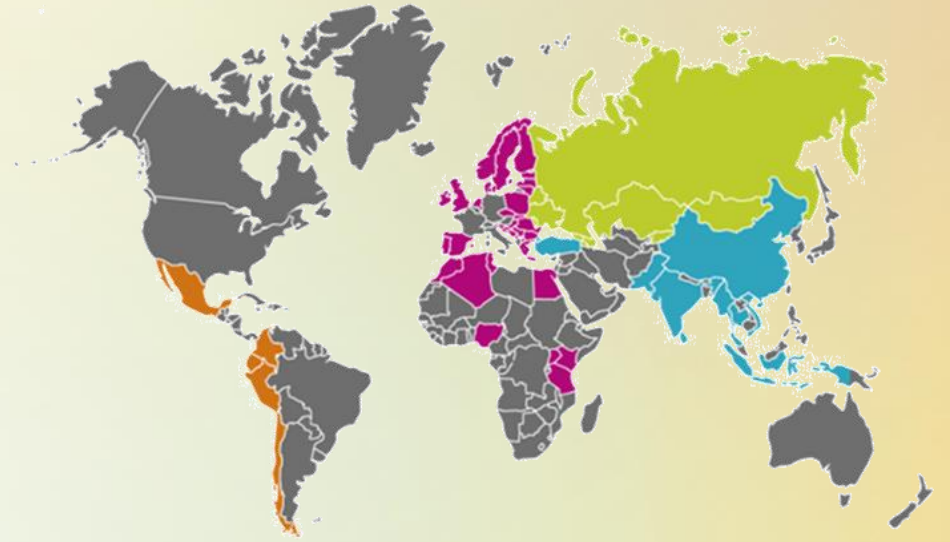


Are you already using feature branches?



WHERE ARE WE NOW?

- **About Oriflame**
- Complexity we face
- Challenges we had when we were growing
- How to get effectivity and flexibility back?
- Take away



- Direct selling company
- 3 millions active consultants
- Whole globe spread
- 250+ million online visits per year

ORIFLAME SOFTWARE

- ~300 people across Europe
- Provides IT solutions exclusively to Oriflame
- Dynamic team with a family spirit in a wonderful town of Olomouc, branch in Brno
- Partners in Ukraine, Poland
- Multinational
- Center of technology innovations



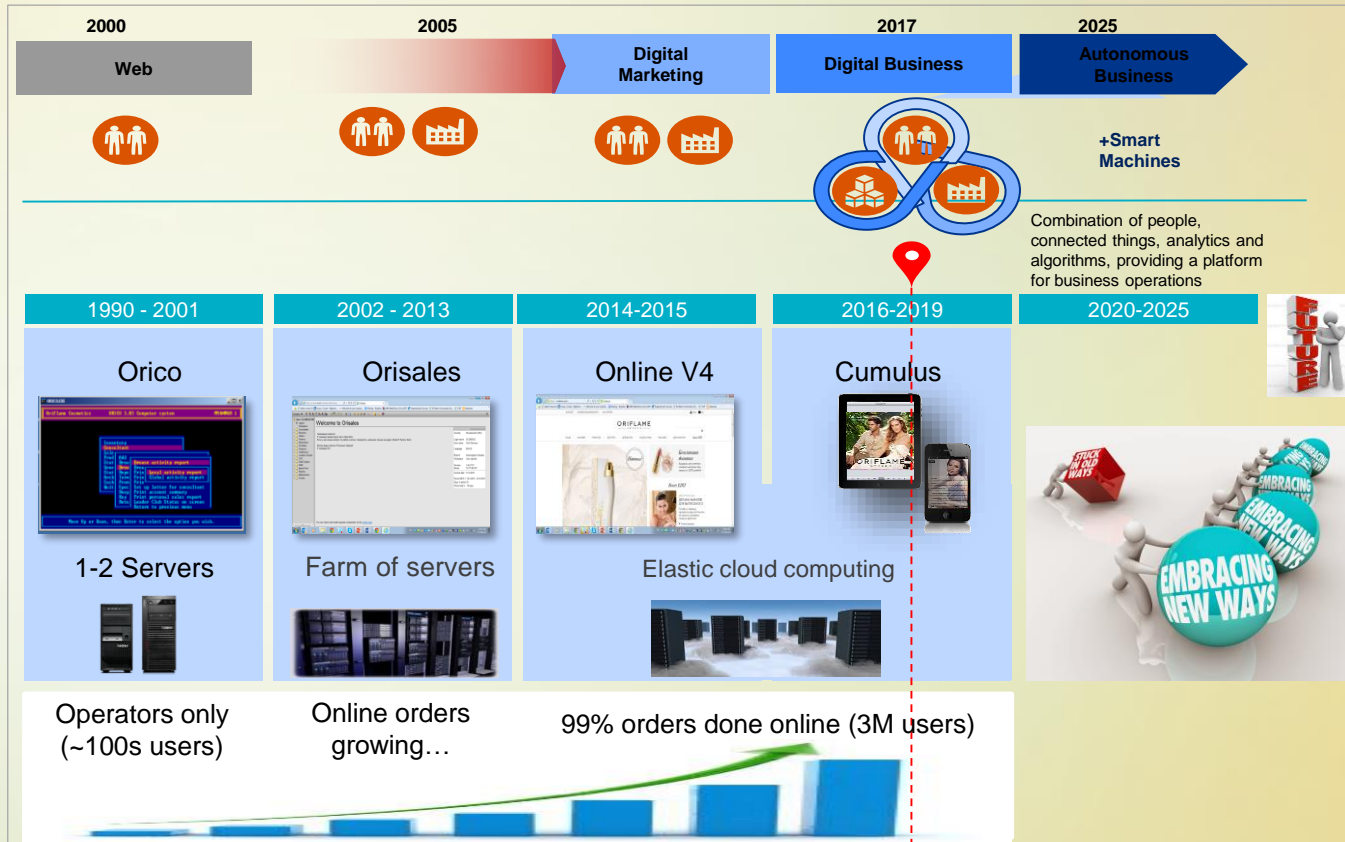
DEVELOPING & SUPPORTING

- Enterprise Resource Planning / Invoicing / Warehouse systems
- Data Warehouse / Business Intelligence
- Product catalogues DTP, pricing
- **Digital e-commerce platform**
 - See next slides

Technologies we use



E-COMMERCE CONSTANT TRANSFORMATION



E-COMMERCE

Catalogue | Become a Consultant | Customer Service

ORIFLAME
SWEDEN

SEARCH

BEAUTY ROUTINES | SKIN CARE | MAKE-UP | FRAGRANCE | BATH & BODY | HAIR | ACCESSORIES | WELLNESS | MEN | Beauty EDT

EDITOR'S PICKS
5 WAYS TO WAKE UP BEAUTIFUL
READ MORE

BEAUTY HIGHLIGHTS

WE RECOMMEND | WHAT'S NEW | BEST OFFERS

EASTER IS HERE
» Shop here

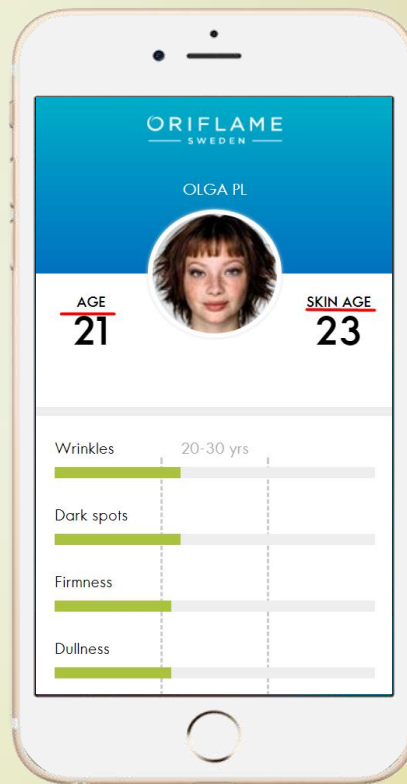
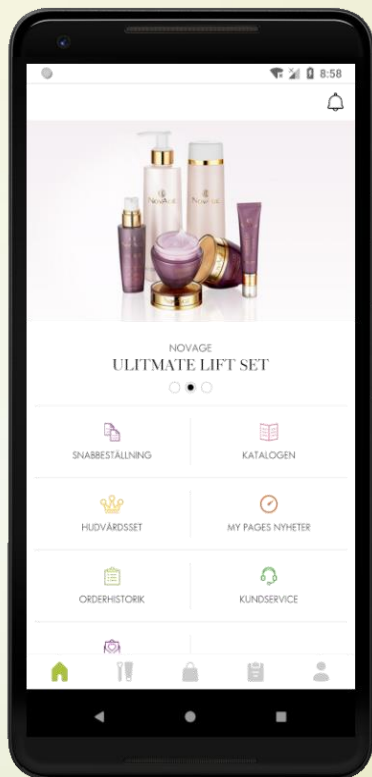
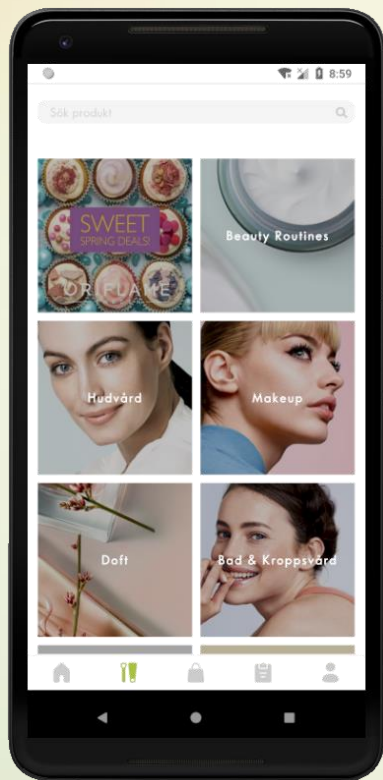
NOVAGE
NovAge True Perfection set
£69.00 ~~£115.00~~
★★★★★

GIORDANI GOLD
Giordani Gold Long Wear Mineral
Foundation SPF 15
£18.00
★★★★★

ELEO
Eleo Hair Mask
£13.00
★★★★★



SEVERAL MOBILE APPLICATIONS



E-COMMERCE TEAMS

- 14 cross-functional distributed development teams
- 2 weeks sprint
- Every team:
 - Front-End & Back-End developers
 - Test Analyst and Engineer
 - Product Owner, Scrum Master, Architect (guilds)
 - Owns specific business domains

WHERE ARE WE NOW?

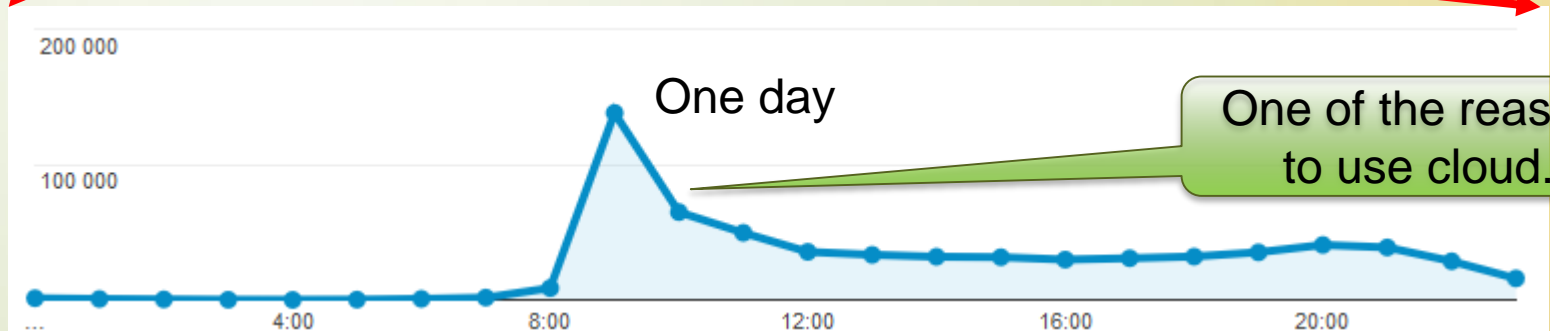
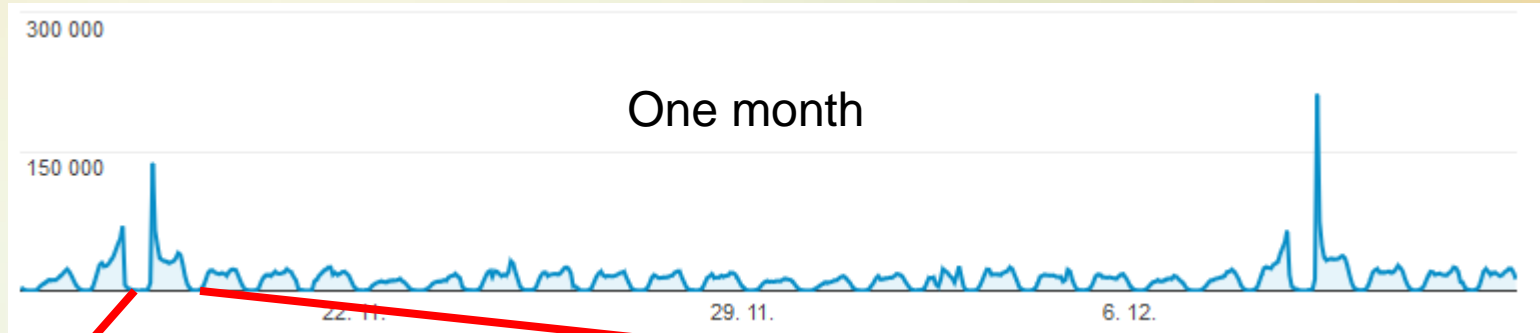
- About Oriflame
- **Complexity we face**
- Challenges we had when we were growing
- How to get effectivity and flexibility back?
- Take away

OUR SITUATION

- 60 countries (legal / functional requirements) in one monolith
- Central driven content
- Many 3rd party systems (sms / payment providers)
- Legacy sales system integration
- 24/7 site availability, many parts (x6 regions) => complex deployment
- Cloud (specific development)

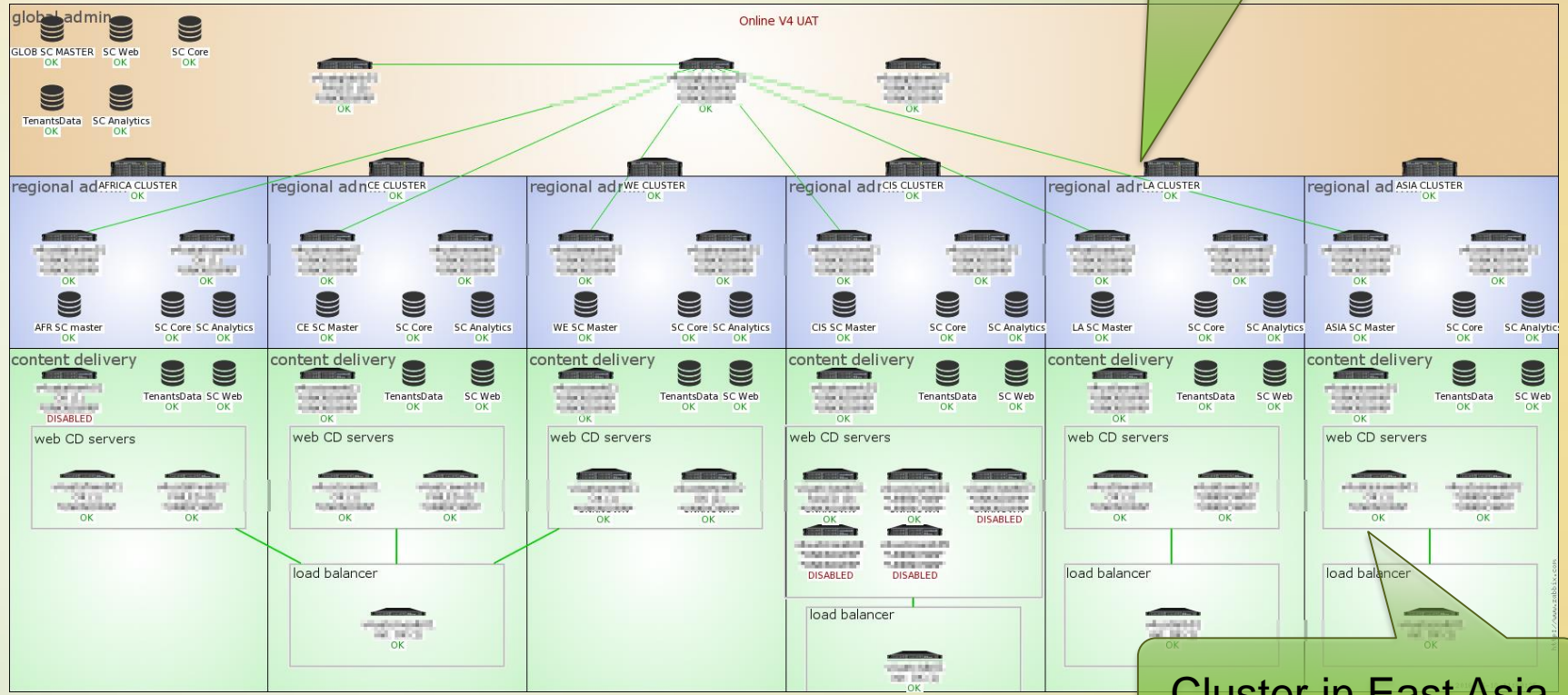
SALES PEAK HANDLING

Page views per hour in one country



QA ENVIRONMENT

Cluster in the South Central US



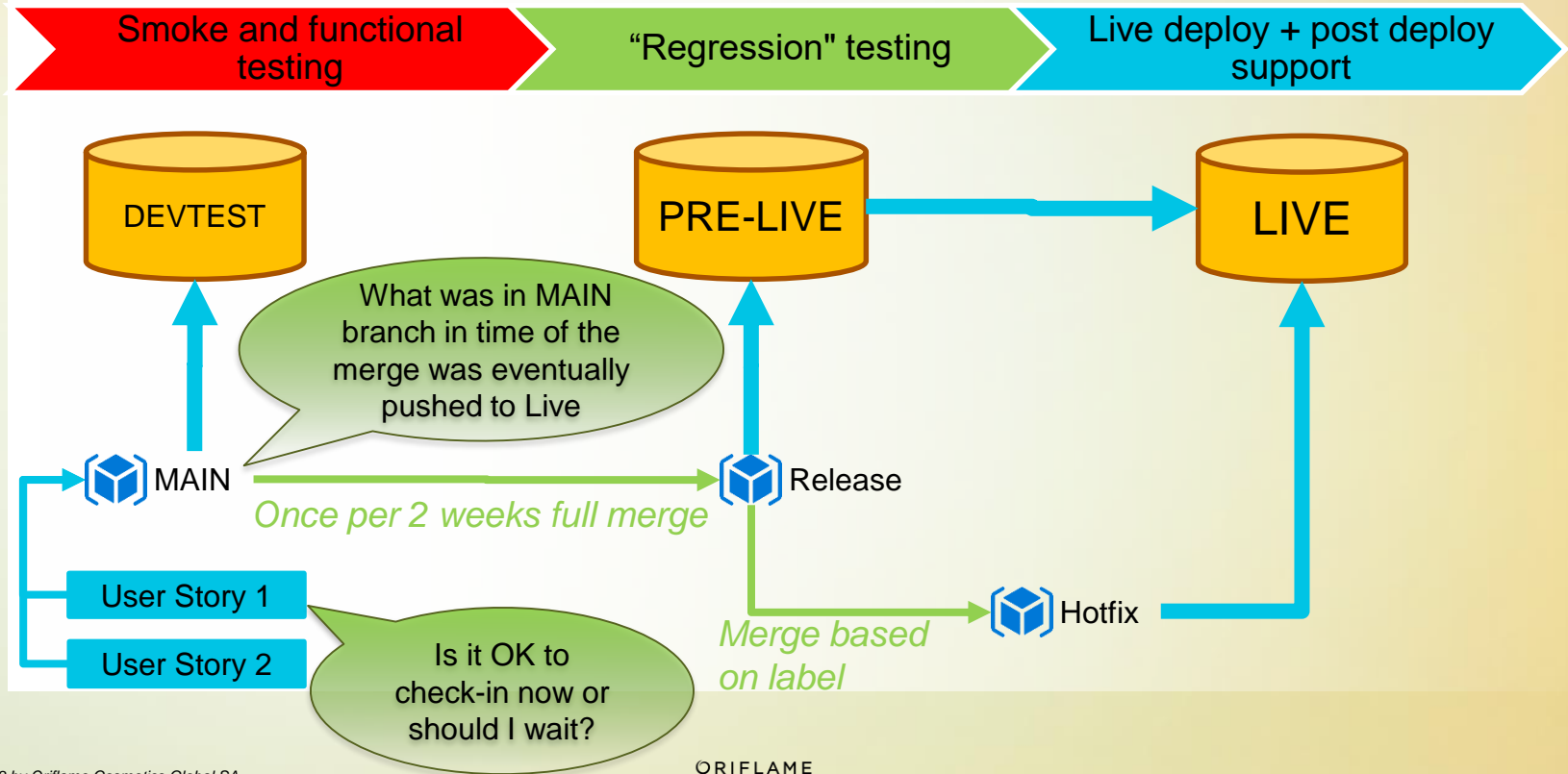
Cluster in East Asia

WHERE ARE WE NOW?

- About Oriflame
- Complexity we face
- **Challenges we had when we were growing**
- How to get effectivity and flexibility back?
- Take away

WHEN WE HAD ONLY SEVERAL TEAMS, DEVELOPMENT WAS EASY...

DEVELOPMENT LIFECYCLE OVERVIEW



WE HAVE BEEN GROWING...

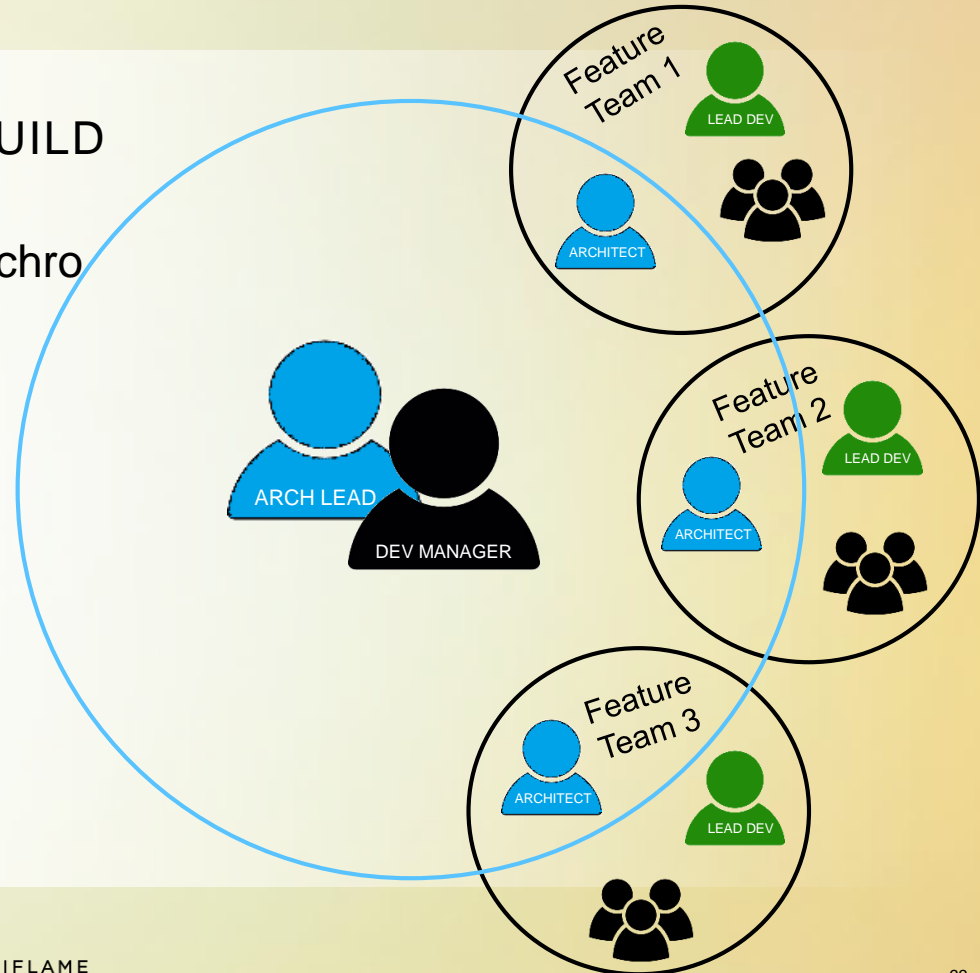
- More developers, but also testers, analysts
- More teams
- Wheel re-inventing
- How to coordinate?



Architect guild was
established

SOFTWARE ARCHITECTS GUILD

- Once per week Architect Synchro
- Dual track agile
 - Architecture track
 - Delivery track



Architect



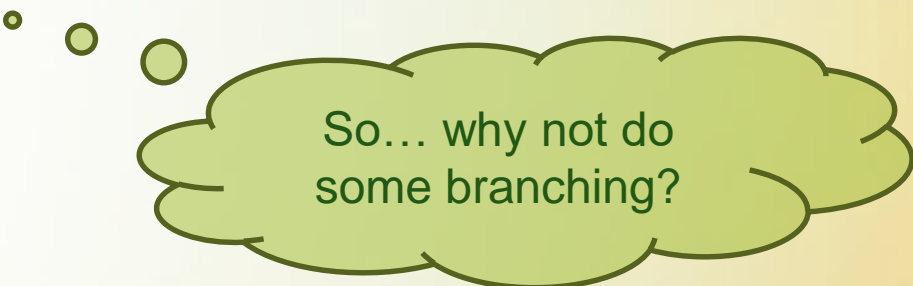
Lead DEV

WE HAVE BEEN GROWING...

- No stable code in Main
- Needs for formal Quality Assurance
- Quality gate:
 - User Story can't be deployed to production unless it's tested
 - Part of Definition of Done

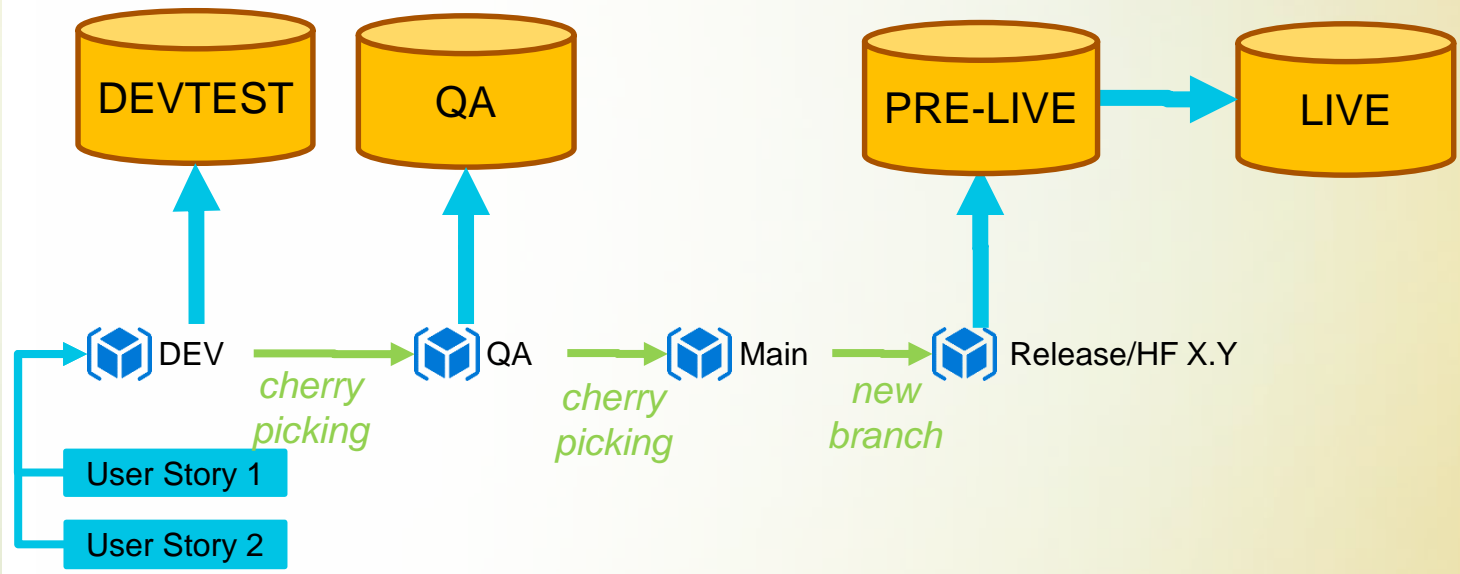
SHOULD WE USE FEATURE BRANCHES?

- Team Foundation Server ☹️
- No environment for testing ☹️
- Environments too complex (Tamagotchi)

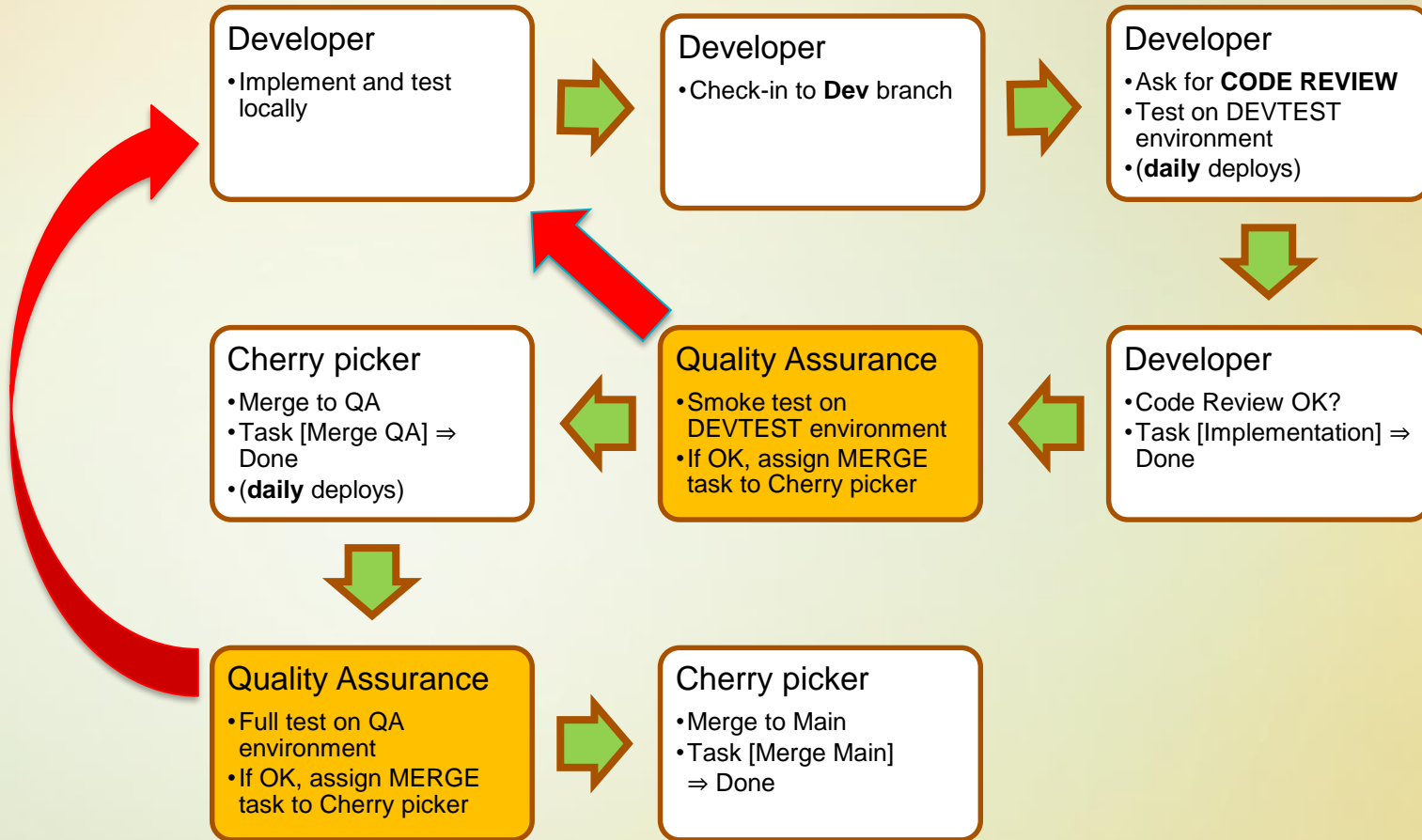



So... why not do
some branching?

DEPLOYMENT WITH QA GATE



ACTIVITY FLOW: REGULAR DEVELOPMENT

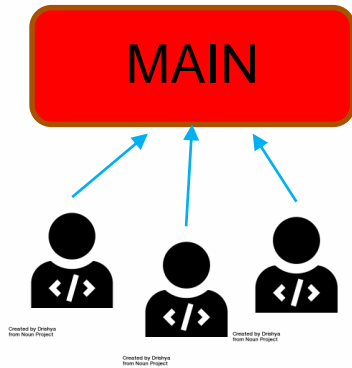




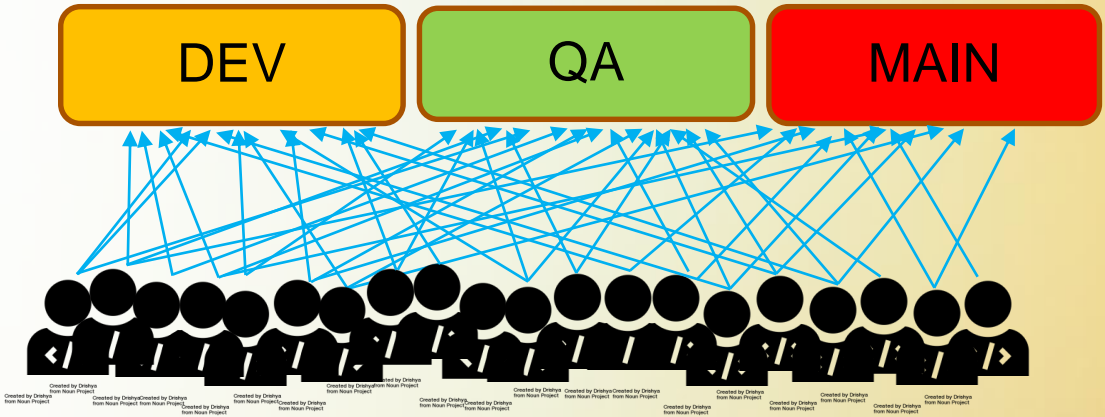
IT SOUNDS GREAT
SO WHERE IS THE
ISSUE?

TOO MANY CONFLICTS..

Former:

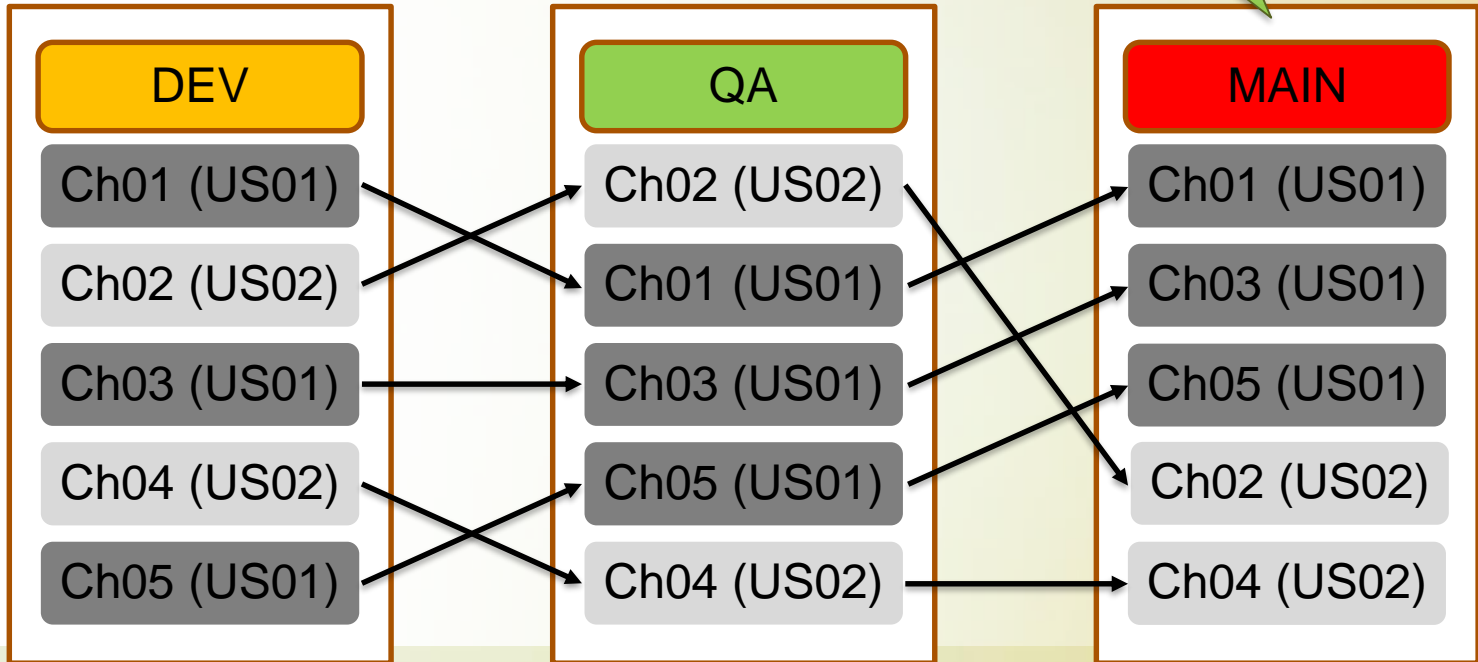


Now:



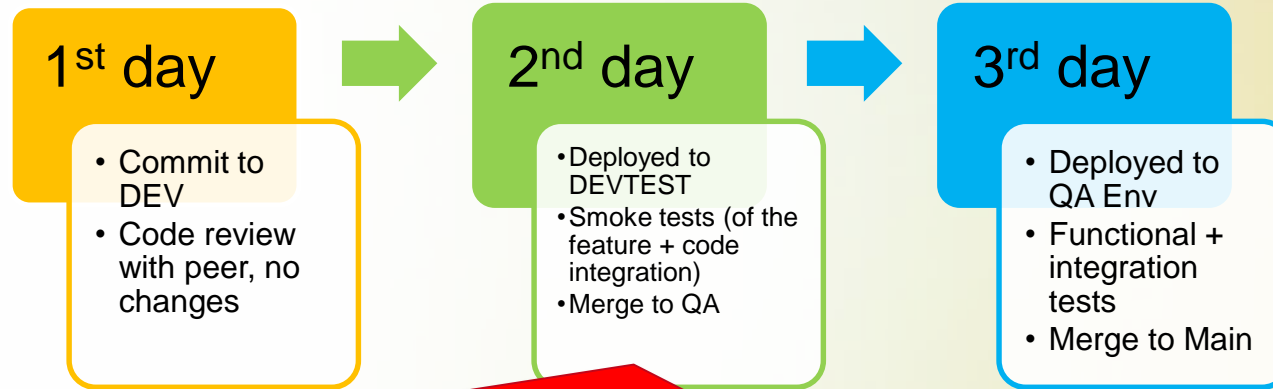
Code in Main not stable..

MERGE HELL



TIME MATTERS...

- Development is not able to quickly deliver new increment respectively get customer feedback



If issue found in DEV => +1 day (+possibly broken environment)

If issue found in QA => +2 days (+possibly broken environment)

3 days to deliver ...
... but usually 6 days or more
... in 10 days sprint

WHERE ARE WE NOW?

- About Oriflame
- Complexity we face
- Challenges we had when we were growing
- **How to get effectivity and flexibility back?**
- Take away

HOW TO GET EFFECTIVITY AND FLEXIBILITY BACK?

- Change starts from the people
 - Retro, Yammer, Slack, E-mails...
- Software Architects Guild
 - Technical solution
- Scrum Masters Guild
 - VSTS Epic & Feature boards on Global level

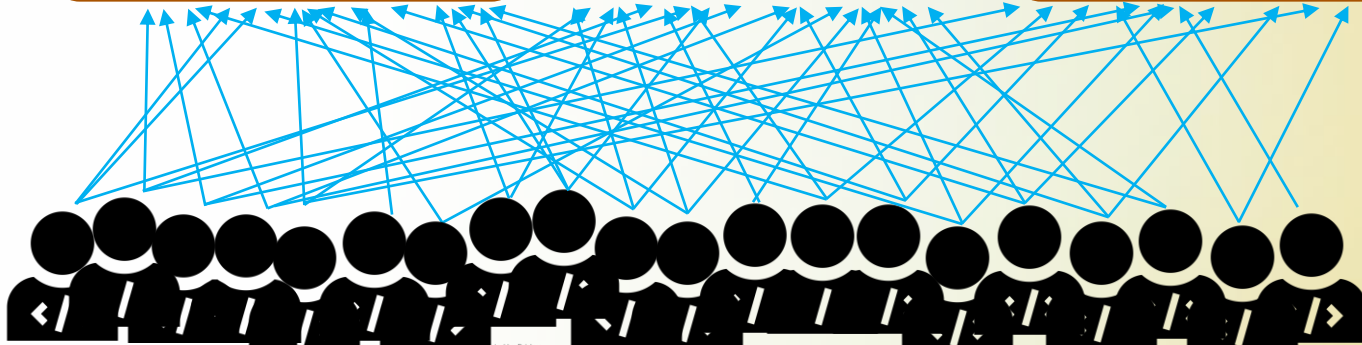


Do you remember?

DEV

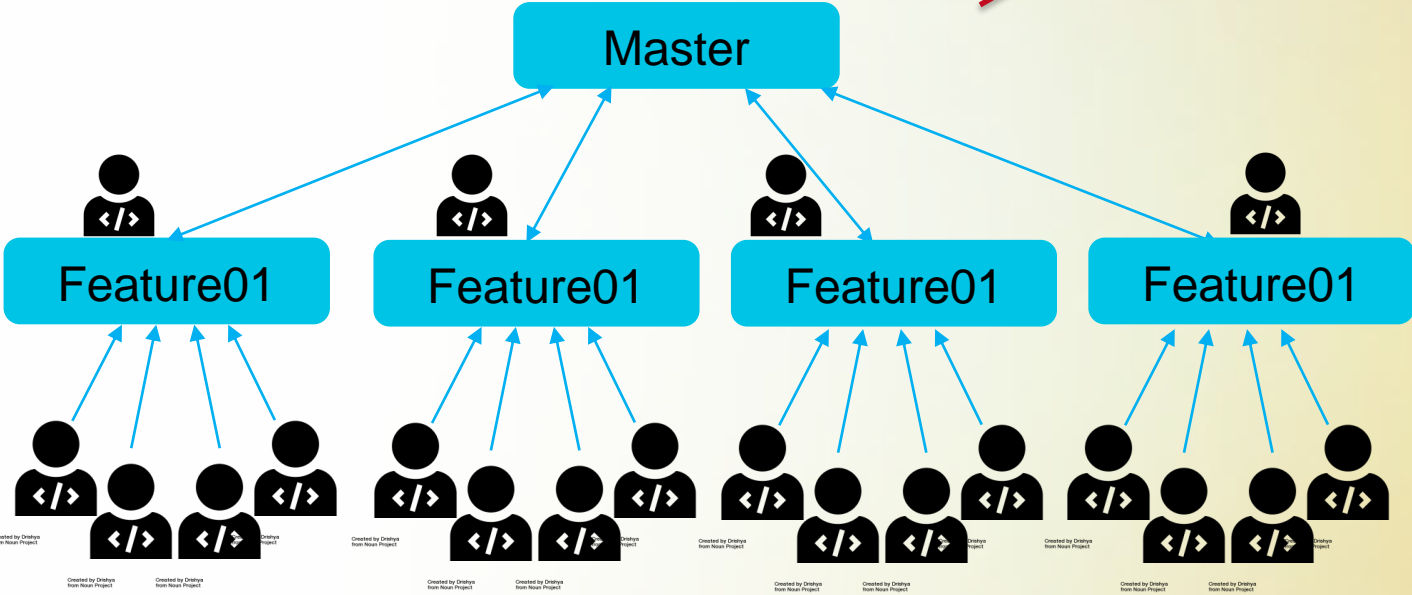
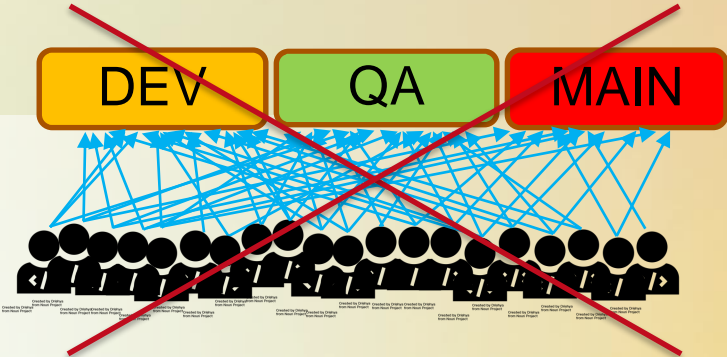
QA

MAIN



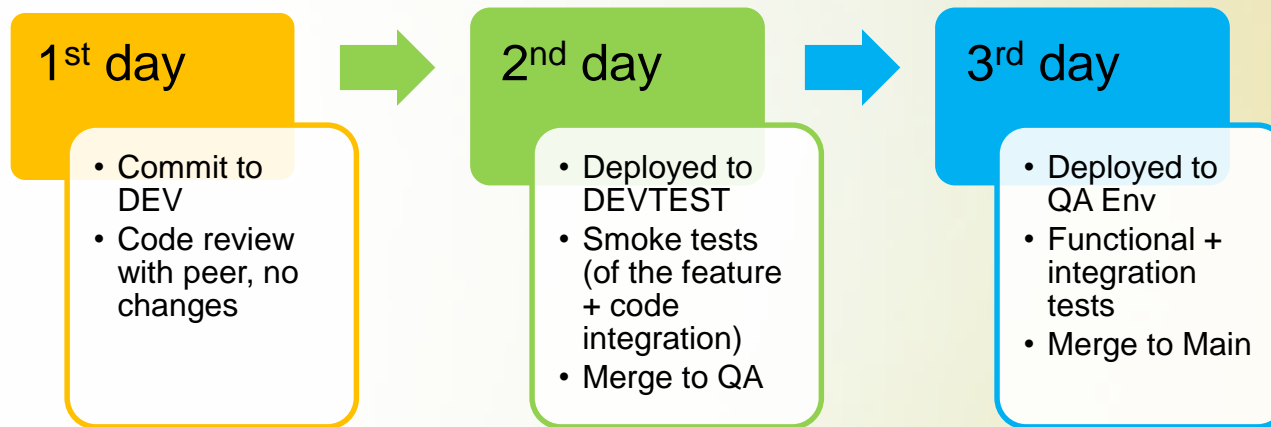
Created by Drishya from Noun Project
Created by Drishya from Noun Project
Created by Drishya from Noun Project
Created by Drishya from Noun Project
Created by Drishya from Noun Project
Created by Drishya from Noun Project
Created by Drishya from Noun Project
Created by Drishya from Noun Project
Created by Drishya from Noun Project
Created by Drishya from Noun Project
Created by Drishya from Noun Project
Created by Drishya from Noun Project
Created by Drishya from Noun Project
Created by Drishya from Noun Project
Created by Drishya from Noun Project

NO CONFLICT IN MASTER BRANCH

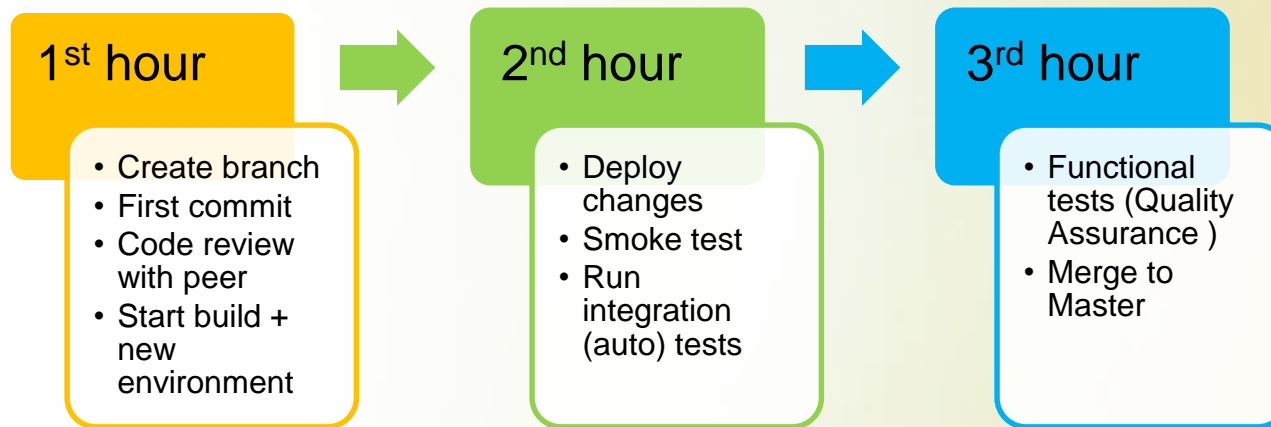
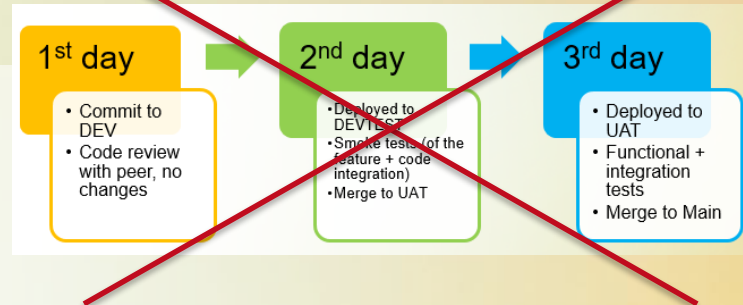


TIME MATTERS... WITH PREVIOUS SETUP

- You remember this...



FROM 3-6 DAYS TO 3 HOURS





THE BENEFITS

WHAT HAS THE SOLUTION BROUGHT US?

- Deployment from 3-6 days to 3 hours
- Faster feedback from Product Owners / customers
 - => Less feature redevelopment
- Higher team responsibility
- End of the merging hell, more stable environments

WHAT DO WE NEEDED FOR FEATURE BRANCHING?

- Isolated Continuous Integration environment per feature branch
- Branch master
- Process change
- Teams involvement
- Mindset change



CHALLENGES

FEATURE SIZE MATTERS...

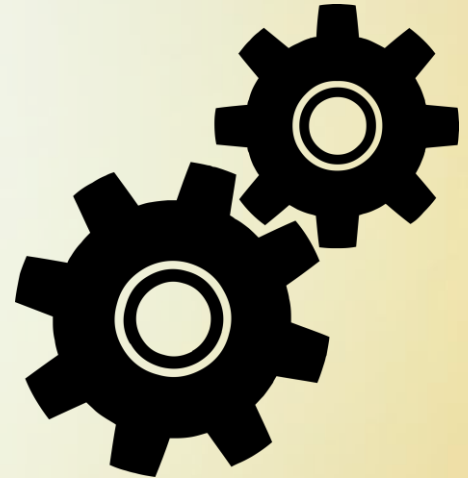
- How big should a feature be?
- Environment costs money + time
- Let's limit environments per team (2-3)

ISOLATION OF DEVELOPMENT (MOCKS)

- We needed to mock 3rd parties
 - Legacy sales systems
 - Sms/email/payment providers
- It's **good**:
 - you develop independently
 - Ultimate responsibility for environment => team
 - it's testable
- But: the mock needs to be developed and kept up to date

AUTOMATION (SELF SERVICE)

- Environment (VM, storage...) creation with one click
 - No image, but install scripts
 - Database/storage snapshot
- Build
- Deployment
- Testing



WHERE ARE WE NOW?

- About Oriflame
- Complexity we face
- Challenges we had when we were growing
- How to get effectivity and flexibility back?
- **Take away**



- Every change come with people
- Communicate
- Automate everything
- Separate concerns, independent development
- Use feature branches 😊

Thank you for your attention!

Questions?

Jan Vilímek
jan.vilimek@oriflame.com
 @VilimekJan

ORIFLAME
— S W E D E N —