LEAN IN SOFTWARE DEVELOPMENT

ITSMF breakfast seminar May 2019

Rauno Kosamo

SETUP AND DISCLAIMER

Product program had four locations (US, Finland, Poland and India) having close to 300 people.

I led and coached the teams in Finland and as I was a member of the R&D management I knew the situation also in a product level.

And as I had a long experience in agile and lean transformation I was a natural member in product transformation team.

These thoughts are from me and me only.

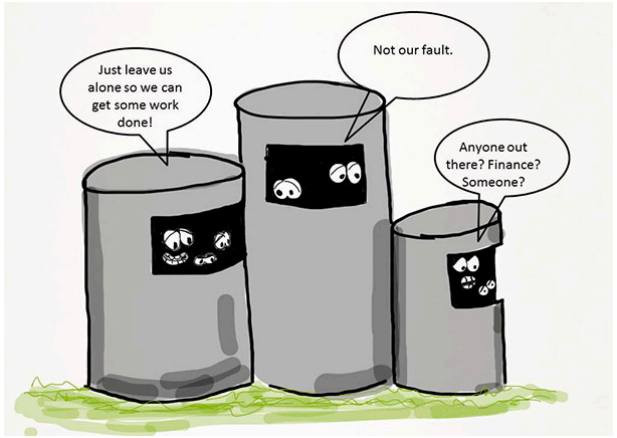
CUSTOMER CHALLENGES

Telecom operators wants commitments for next one or two years

Some operators wants release bi-weekly, some only once per year and the rest between

INTERNAL CHALLENGES

Functional silos caused problems like sub-optimized flows, prioritization problems and lack of system competence



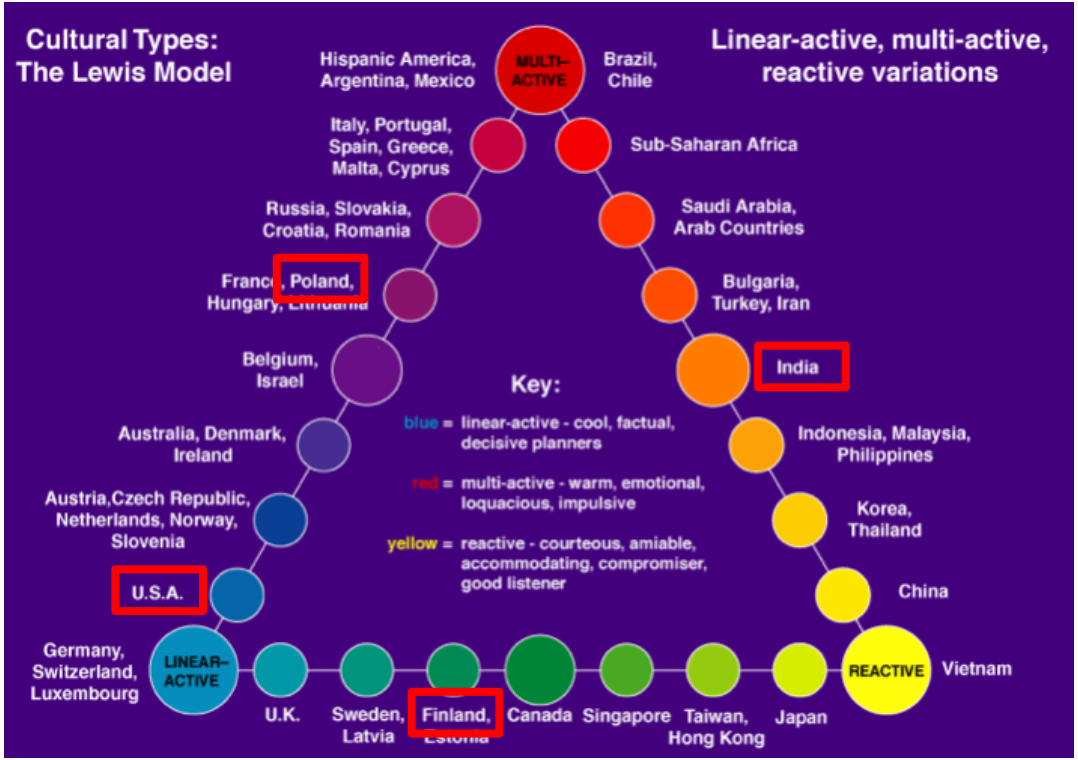
Heavy and complex steering structure caused slow decision making and poor visibility

Focus on 100% allocation caused that any sudden delay in team level caused delays in program level and for keeping the schedule the quality was compromised

CULTURAL CHALLENGES

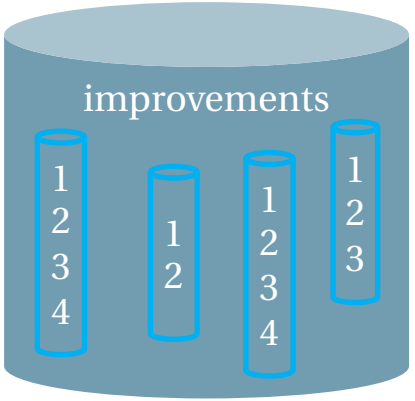
Conflict areas:
Commitments: Yes, yes vs. No, no
Requests: Managers / Religion vs. Experts
Decision making: Manager vs. Experts

LINEAR-ACTIVE	MULTI-ACTIVE	REACTIVE
Talks half the time	Talks most of the time	Listens most of the time
Does one thing at a time	Does several things at once	Reacts to partner's action
Plans ahead step by step	Plans grand outline only	Looks at general principles
Polite but direct	Emotional	Polite, indirect
Partly conceals feelings	Displays feelings	Conceals feelings
Confronts with logic	Confronts emotionally	Never confronts
Dislikes losing face	Has good excuses	Must not lose face
Rarely interrupts	Often interrupts	Doesn't interrupt
Job-oriented	People-oriented	Very people-oriented
Sticks to facts	Feelings before facts	Statements are promises
Truth before diplomacy	Flexible truth	Diplomacy over truth
Sometimes impatient	Impatient	Patient
Limited body language	Unlimited body language	Subtle body language
Respects officialdom	Seeks out key person	Uses connections
Separates the social and professional	Mixes the social and professional	Connects the social and professional

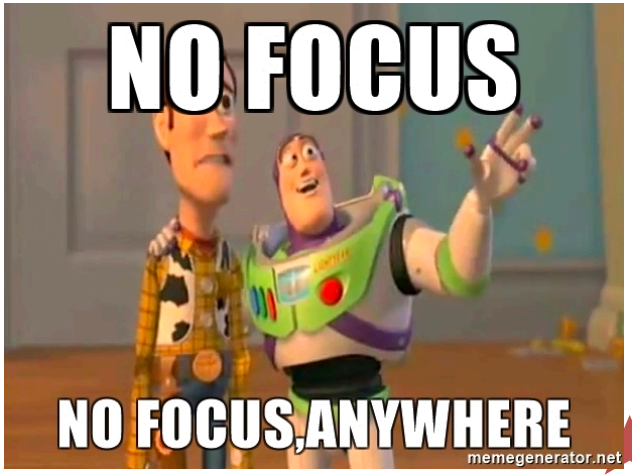


WHY WE FAILED TO IMPROVE THE SITUATION

We got a lot of improvement items from retrospectives and other similar sessions



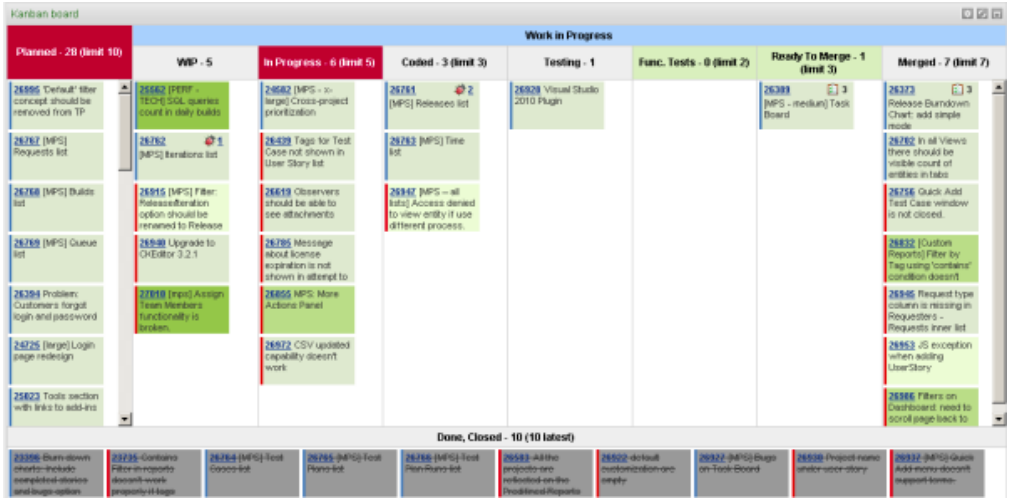
Due the lack of e-2-e priorities we had no common focus



Improvements prioritization was based on the hunch and each silo had own priorities

NITOR
DIGITAL ENGINEERING
SO, WHAT WE DID?

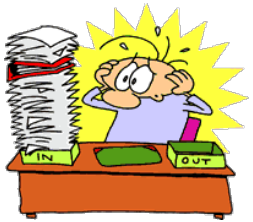
WE BUILT PRODUCT LEVEL E-2-E KANBAN BOARD



And when we understood the big picture we started to see the forest from the trees and the problems in it

EXAMPLES OF E-2-E FINDINGS

We had content for 3 years in our backlog

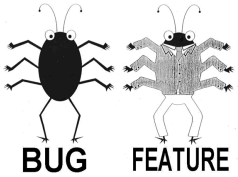


Bottlenecks in product flow

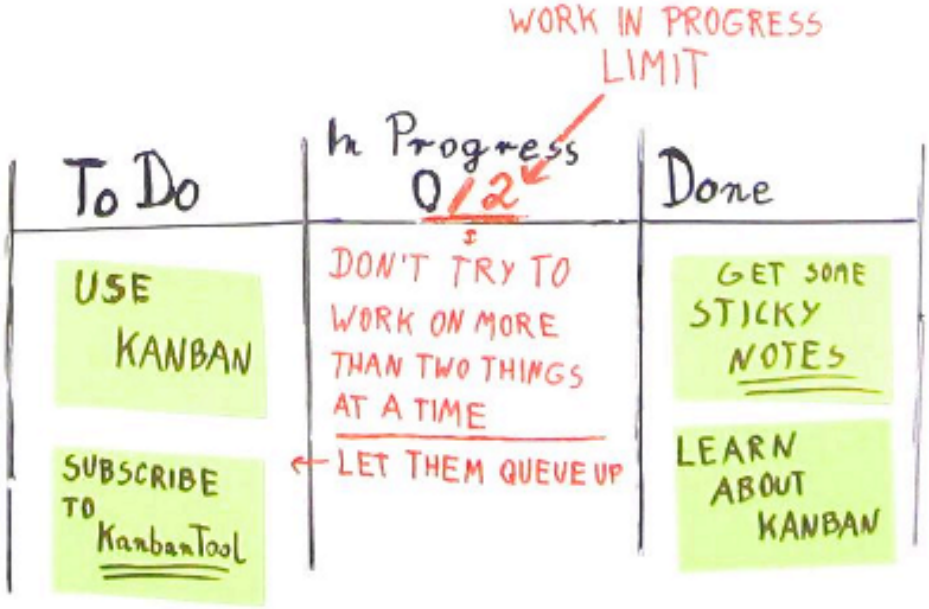
Too many features under work at the same time

A lot of waste done in different places

Quality problems

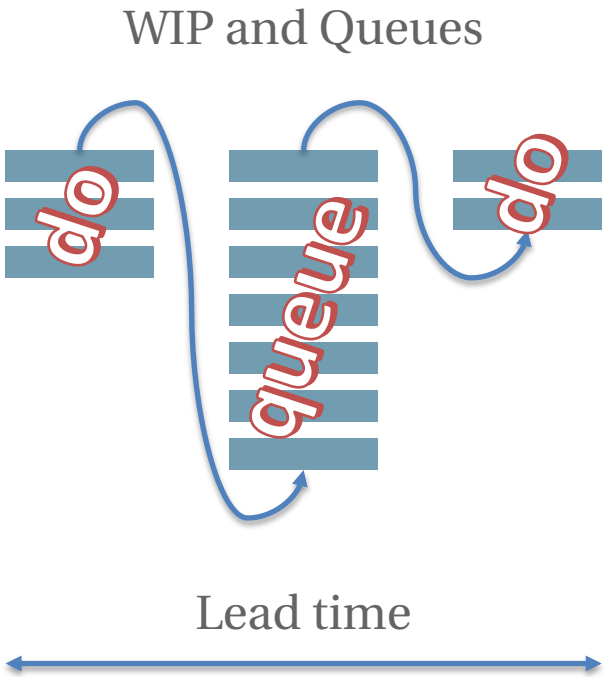


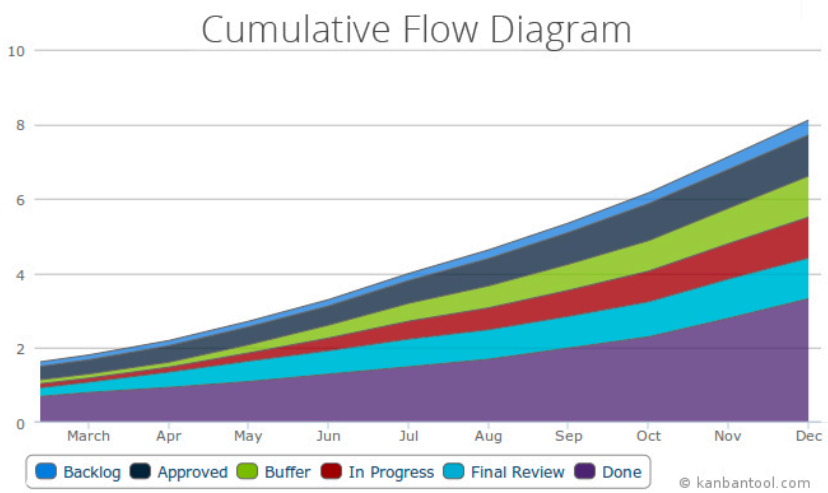
WE LIMIT WORK-IN-PROGRESS

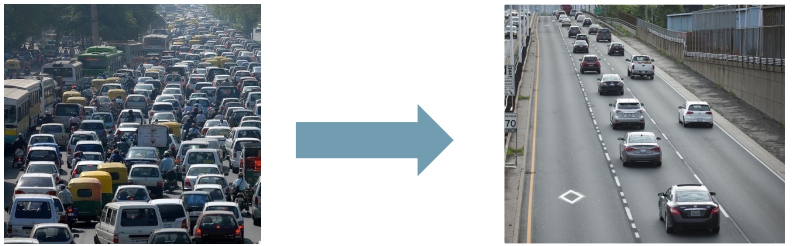


By limiting how much unfinished work-in-process, you can reduce the time it takes an item to travel through the Kanban system.

WE STARTED TO MEASURE OUR E-2-E FLOW







WE MADE POLICIES EXPLICIT

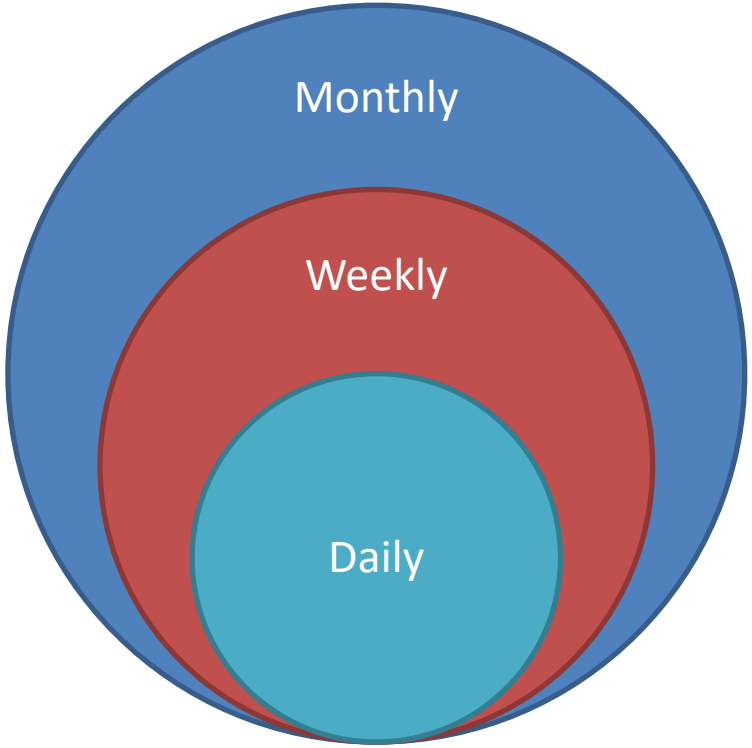
We agree on policies and make them visible.

- Phases in Kanban
- Templates and practices

Examples:

  - Only one Feature at time for each Feature Team
  - Definition of Ready and Definition of Done for each phases
  - E.g. pull request, review and commit practices agreed among teams

WE IMPLEMENT FEEDBACK LOOPS



Daily

- Team level stand ups
- Continuous Integration, Test Automation, Continuous Deployment

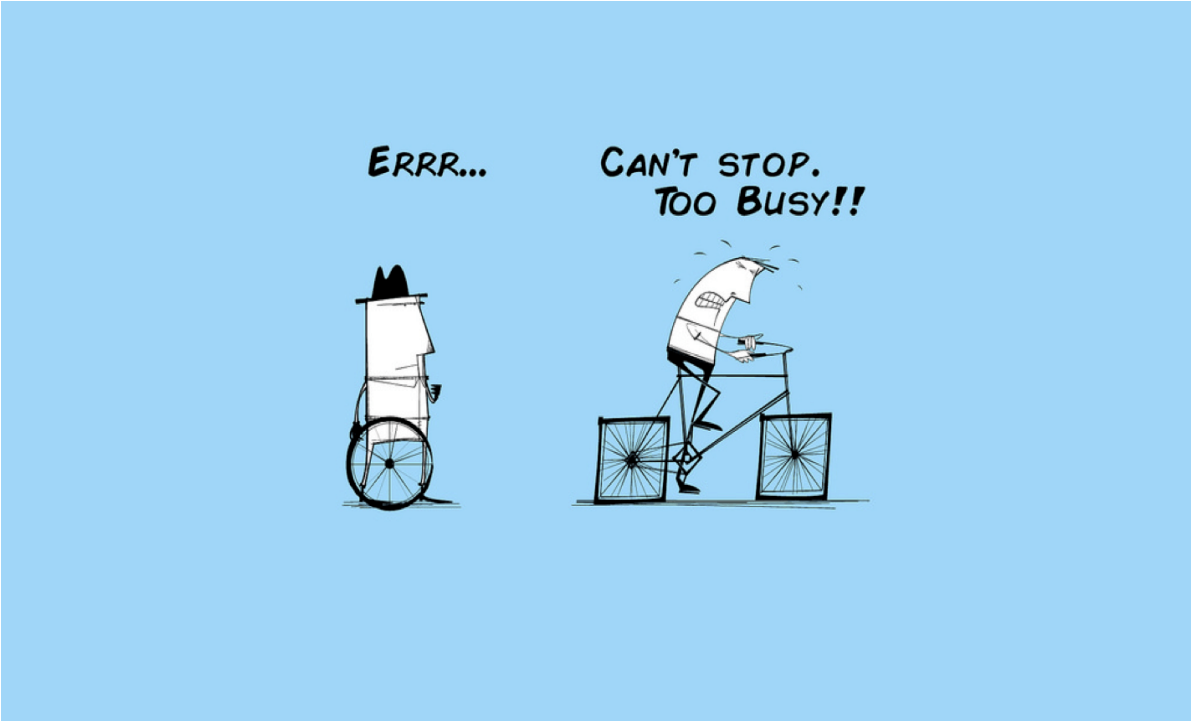
Weekly

- Team level demos
- Improvement follow ups
- Metrics
- Team level retrospectives (User Story level)

Monthly

- Product level Demos
- Feature level retrospective summaries
- Improvement backlog prioritization

WE STARTED CONTINUOUS E-2-E IMPROVEMENT

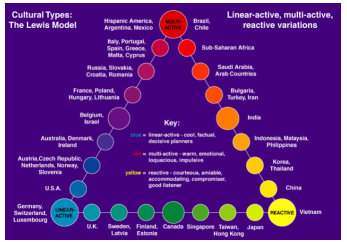


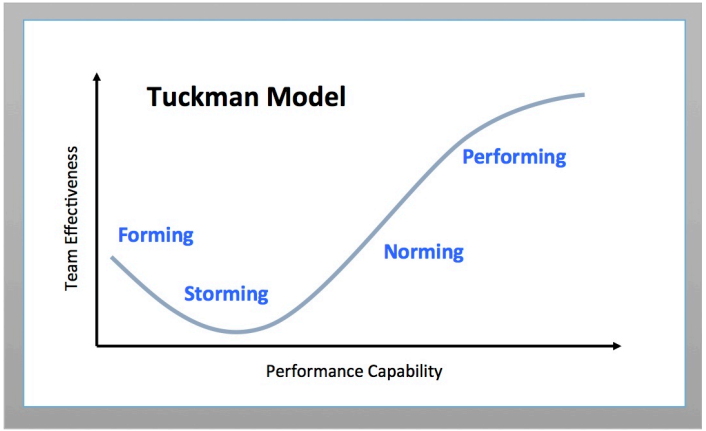
NITOR
DIGITAL ENGINEERING
HIGH PERFORMING TEAMS
AND HOW TO WORK IN LEAN

BUILDING A HIGH PERFORMING TEAM

Understand the cultures!

If your team members are from different countries like Russia, Estonia, Indonesia, Belarus, Gambia and Finland you really need to understand different cultures as well





http://cmforagile.blogspot.com/2018/11/tuckman-model-strategies-to-achieve-and.html

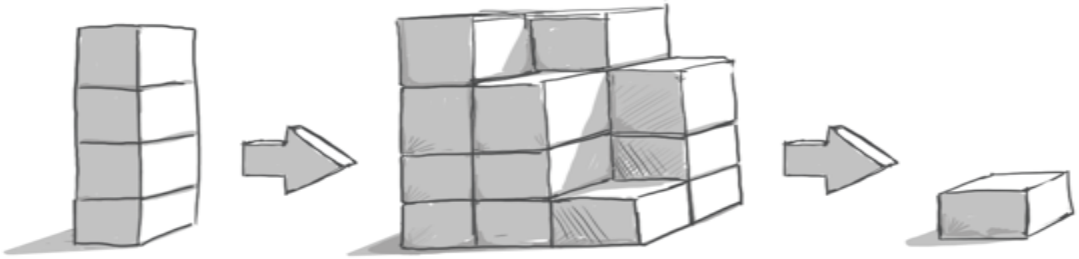
Learn and know how to build team!

When ever you change the team by e.g. adding team members, team goes always back to Forming state!

To build high performing team needs time!

PULL VS. PUSH SYSTEMS

Mass manufacturing: push (produce per target)



Lean manufacturing: pull (produce only per need)

Pull is possible when cycle-times are already fast!

THANKS! QUESTIONS?

Discussion topics if we have time:
Continuous Integration, Test Automation and Continuous Delivery
Tools like Jira and Confluence
Challenges in change