Introducing agile in large-scale projects

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background

› Ericsson Nikola Tesla (Zagreb, Croatia)
› IT Company of ~1700 people, with R&D Center of 700 people

› We are an R&D Unit working with SW/HW Platform development for next generation nodes in Radio Access Network

› ~12 years of experience with this complex product
The challenge

- Develop a new product for next generation telecom node...
Agile framework

› Mindset
› Commitment
› Behavior
› Visualization
› Scrum
› Feedback Loops and Continuous Improvements
› Crossfunctional and longlasting teams
› SW Architecture and SW Craft
FEATURE Complexity

› New SW/HW Development, uncertain requirements with a lot of dependencies, delayed and very unstable HW development plan...

› Feature Anatomy
› Customer collaboration
› Small functional pieces
› Visualization of use cases
› Adaptive to frequent changes
› Sprints
› Frequent demo’s
big organization

› Many teams in different organizations and companies working together on 4 different sites, all very dependent on each other...
› Difficult to connect them all, share info

› Visualization – openness and whitebox view
› Communication
› Frequent Deliveries
› Continuous Integration
› Common User stories
› Align Acceptance Criteria
› Align Definition of Quality
Long lead time

- Goal is somewhere there...
- Requirements, teams, people change
- How to keep focus?

- Keep the majority of team intact and constant
- Visible priority backlog
- Team ceremonies
- Continuous learning and improvements
- Reflect on the achievements and goals
- Focus on right things
Stakeholders

› Many stakeholders with different priorities
› Company boundaries
› Market demands

› Collaboration & Transparency
› Communication & Trust
› “Shield” teams from impacts
› Try to have a steady pace
› “Safe to Fail” Environment
Empowerment and creativity -
GRADUAL Integration and tEST

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Ext IFU 3 & 4
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Ext IFU 6
Ext IFU 7
Ext IFU 8

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Empowerment and creativity: Sw Architecture

Control Board

Board 1

Board 2
LeSSONs LEARNED

› Agile introduction is a journey
› Mindset change – the most difficult part in big organization with a lot of mindsets
› Discipline for ceremonies and framework needed
› Collaboration, trust and open communication is the key
› Biggest benefit of Agile is in doing small valuable things and get fast and frequent feedback, continuous learning and improvements in real time
› Agile empowers teams and individuals, it encourages creativity and innovation – key to cut leadtime
The result

→ 30% LEADTIME ↓
→ EXCEPTIONAL QUALITY!
→ IMPROVEMENTS
→ NEW DEVELOPMENT SOLUTIONS
→ BROAD COMPETENCE
→ MINDSET → NO INTO YES!
→ PUSH INTO PULL!
→ FEELING OF ACHIEVEMENT
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