Volvo Cars:
Från vattenfall till agil utveckling

Maria Carlsson

XC90 SUV

S90

V90

XC60

V40, S40, XC40?

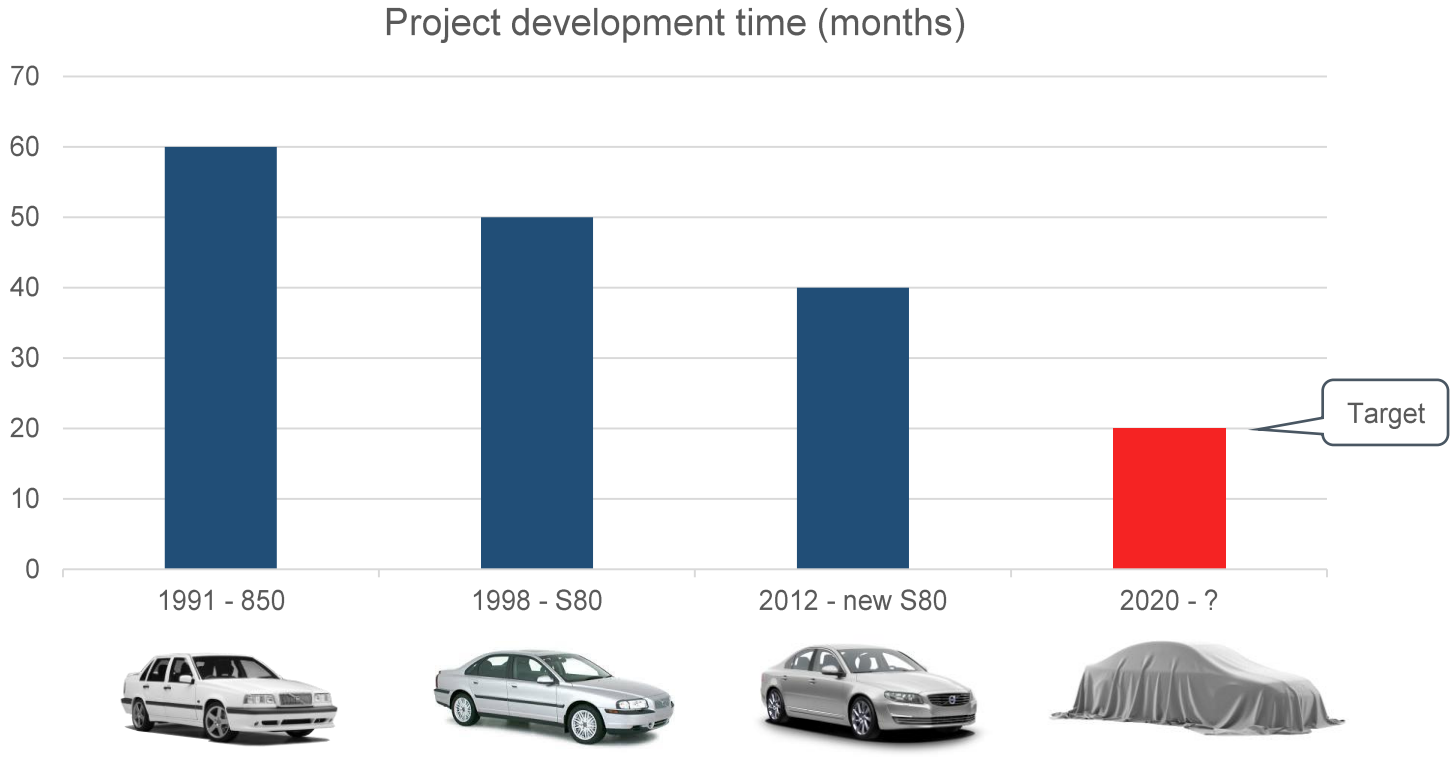
Trends - technology

- Electrification
- Autonomous Cars
- Connectivity

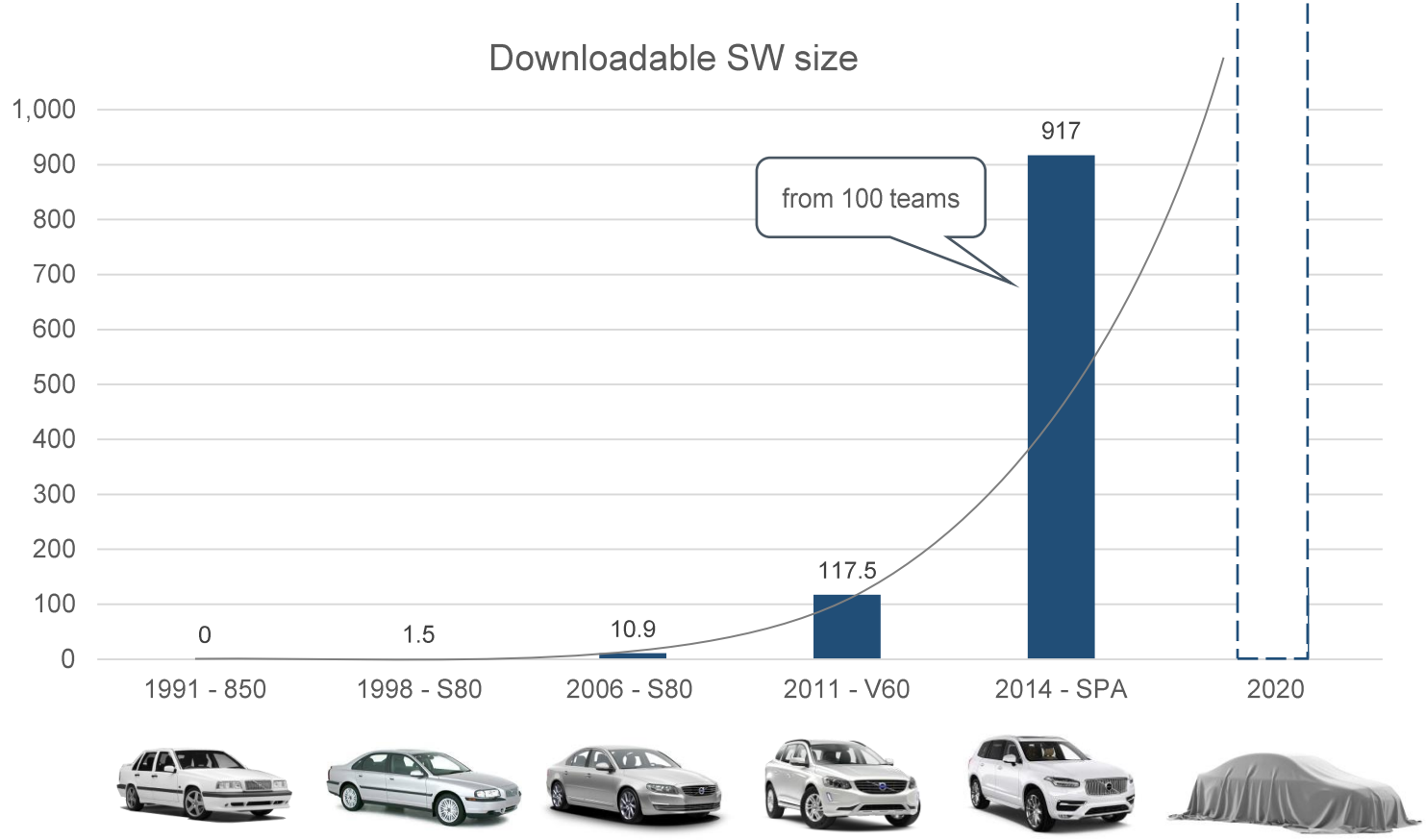
Trends – business model

- Products which improve over time
- New partnerships
- Platform for open source? Services?

Trends - Lead Time



Trends - SW size



Key to success: ability to adjust and change

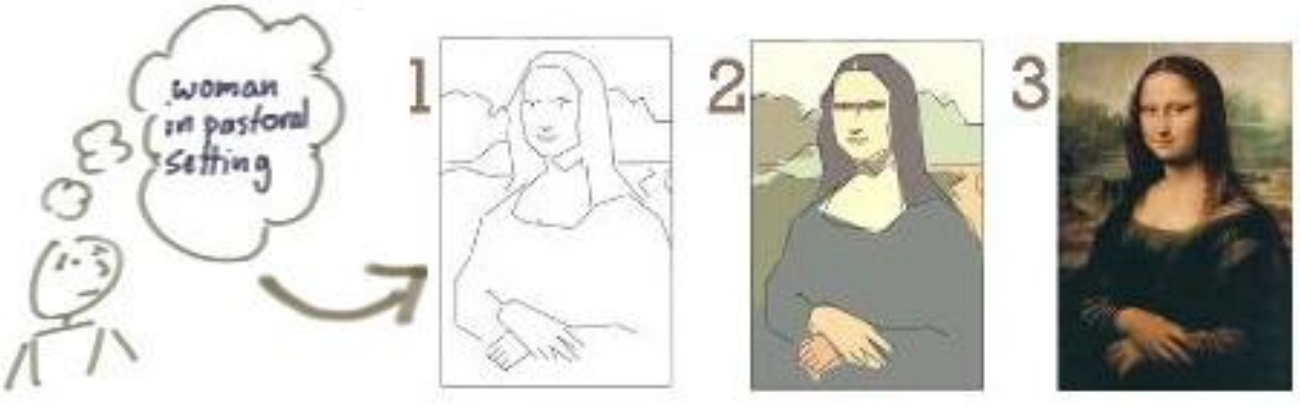
Key to success - agile perspective

- Frequent, short loops => Smaller batches
  - Ability to break down content into small steps
  - Decoupling HW/Basetech <-> Application SW
  - Agile contracts
  - Cross-functional, self-organizing teams

- Automation
  - Investment (tool chain, automated test cases)
  - New competence

Incremental

Iterative



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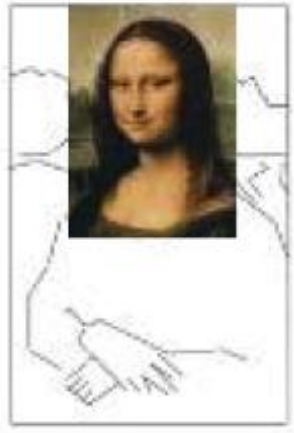

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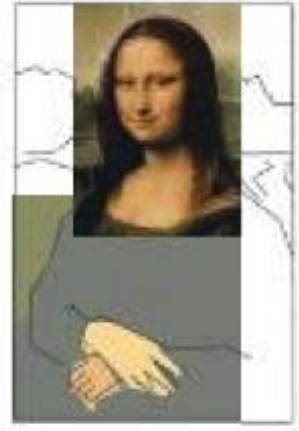

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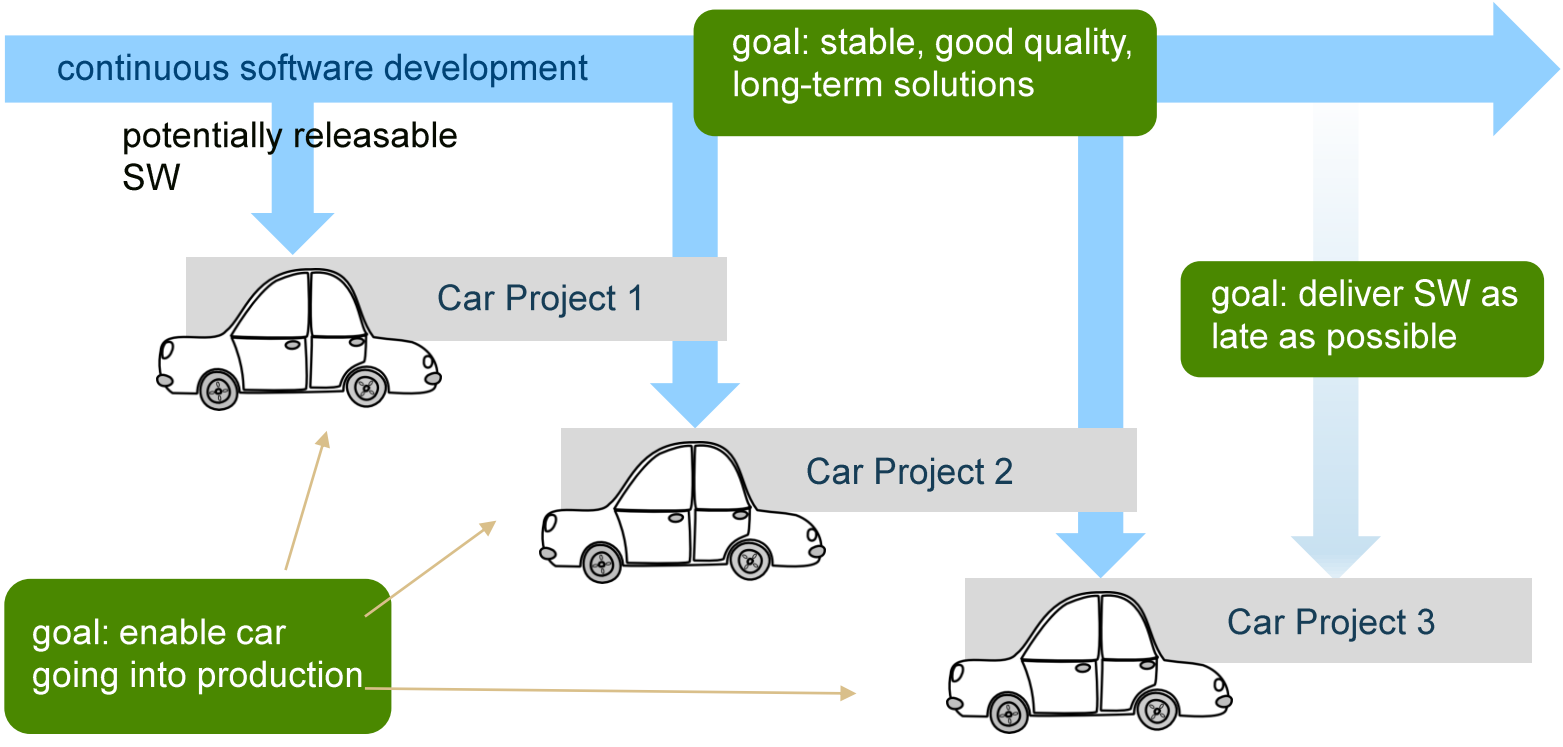
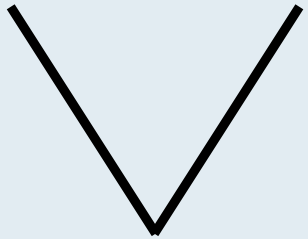
simplified main track



Challenges – automotive specific stuff

- Most complex consumer product
- 100+ ECUs from various suppliers
- Mechatronics
- Safety/Security, Asil, ISO26262
- Autosar (AUTomotive Open System ARchitecture)
- Costly test environments

finish



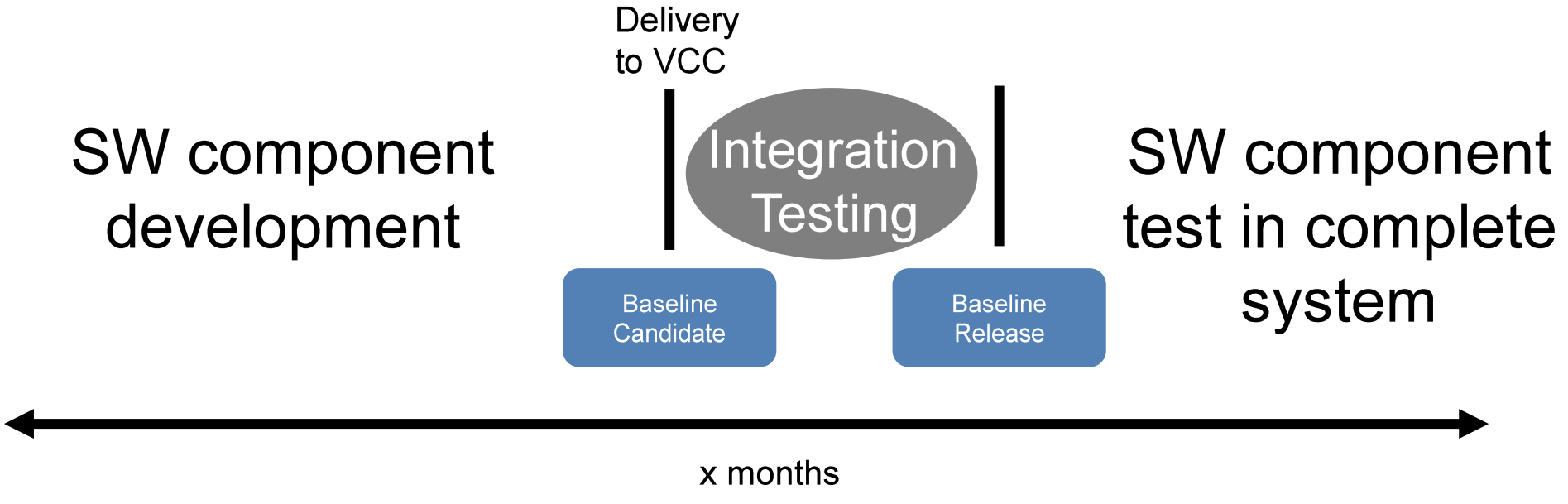
“If you don’t have time to do it right, when will you have to do it over”

“These things can actually be thought out in advance, and that is time well spent.”

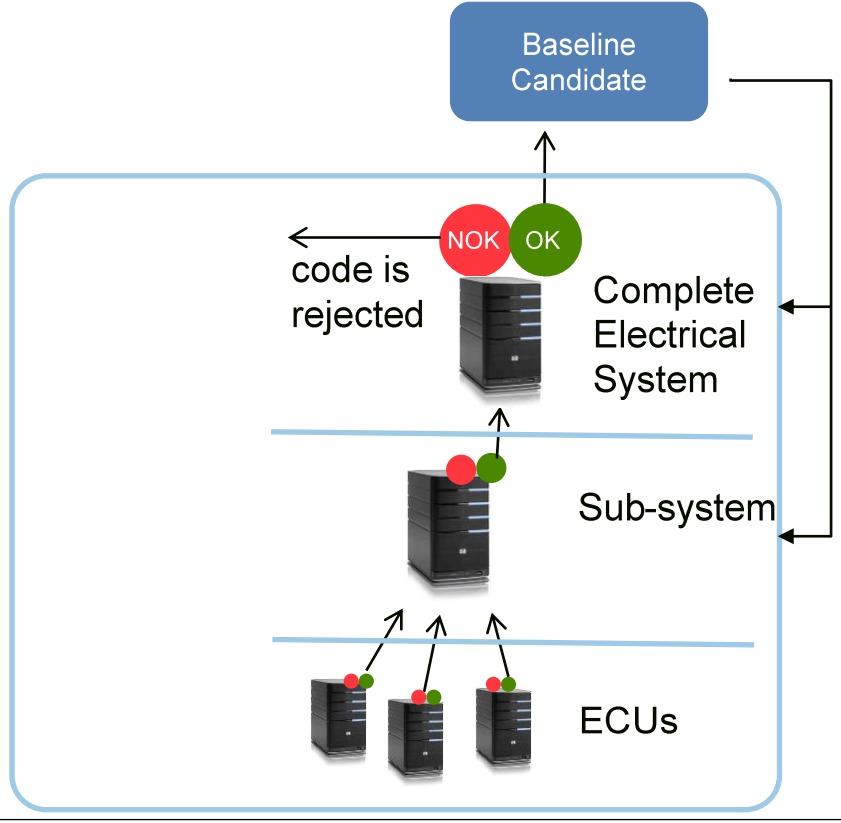
“Since we don’t know exactly what we want we strive to do as little as possible, but do it in a way so that we can get customer feedback on it, even if we have to do some rework as we learn more. This pays back in the end.”

paus

Todays development loop – VCC



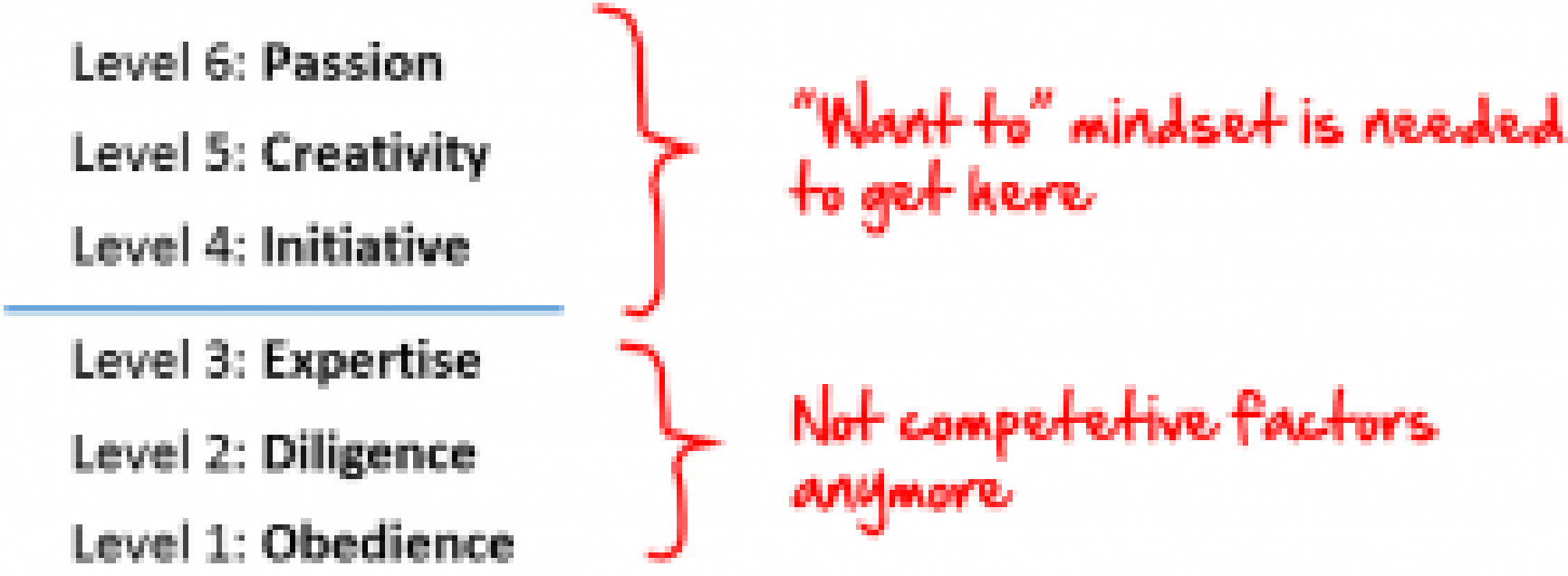
Continuous integration at VCC – first st



Who should come and work at vcg?

- Technical skills
- Ready for a challenge
- Understand SW engineering in a larger context
- Ability to network

Who should come and work at vcg?



(Gary Hamel)