



Informatik in neuer Dimension

Löwenfels
partner

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Strategies for Agile Multiproject- Management

An Experience Report
by
Jiri Lundak

- ▶ Head of development at Löwenfels Partner AG, Lucerne, Switzerland
- ▶ 20+ Years of software development experience as developer, architect and coach
- ▶ Practicing Certified ScrumMaster
- ▶ Change agent for introducing Agile practices

- ▶ Develops software for Swiss social security agencies
- ▶ Founded nearly 20 years ago
- ▶ Embraced Scrum in July 2004
- ▶ Currently develops 3 projects for 3 different customers
- ▶ Currently has 25 employees and 6 freelancers
- ▶ Works with 4 (soon to be 5) teams, of which one is nearshore

1. Common Problems of Software Projects
2. More Woes with Multiple Projects in Parallel
3. Five Enemies
4. What really happens
5. What we are doing
6. Questions?

1. Problems of Software Projects

Software Projects...

- ▶ ...fail
- ▶ ...cost too much
- ▶ ...end too late
- ▶ ...are not transparent
- ▶ ...are difficult to control
- ▶ ...are muddy, complex

2. ...More Woes to Come

Multiple projects in parallel...

- ▶ ...fight for resources
- ▶ ...increase task-switching probability
- ▶ ...have negative side-effects on each other
- ▶ ...provoke bottlenecks
- ▶ ...cause conflict of interests
- ▶ ...make individual projects later
- ▶ ...are even more complex to handle

2. ...More Woes to Come

Multiple projects in parallel...

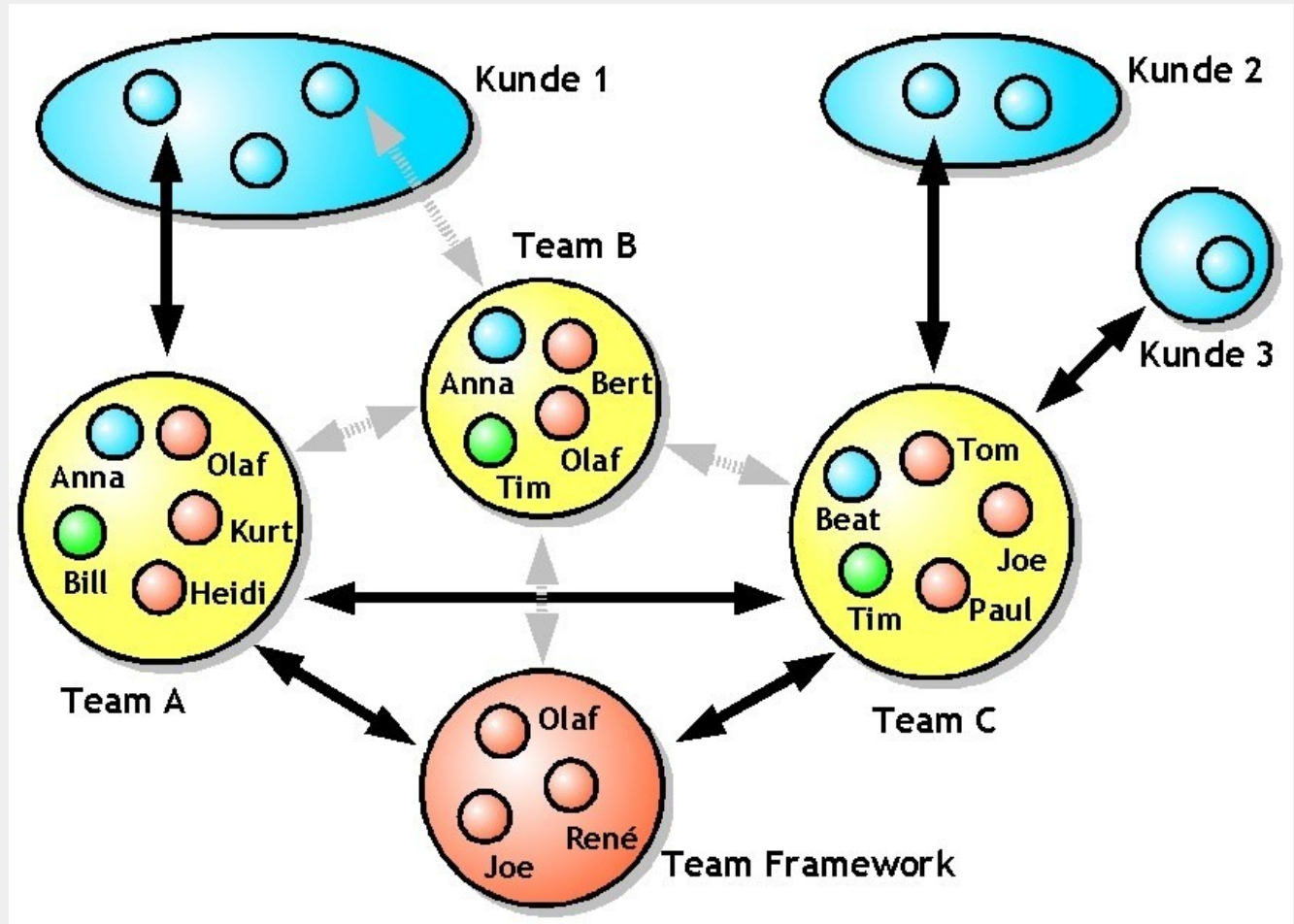
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- ▶ ...provoke bottlenecks
- ▶ ...cause conflict of interests
- ▶ ...make individual projects later
- ▶ ...are even more complex to handle

▶ **If you have a chance: Don't do it!**

▶ **But if you have to anyway...**

3. Multiple Customers, Teams, Projects

► Dysfunctional Development?



3. Five Enemies

- ▶ Fight over Limited Resources
- ▶ Communication Breakdown
- ▶ Knowledge Non-Sharing
- ▶ Task-Switching
- ▶ Budget Buckets

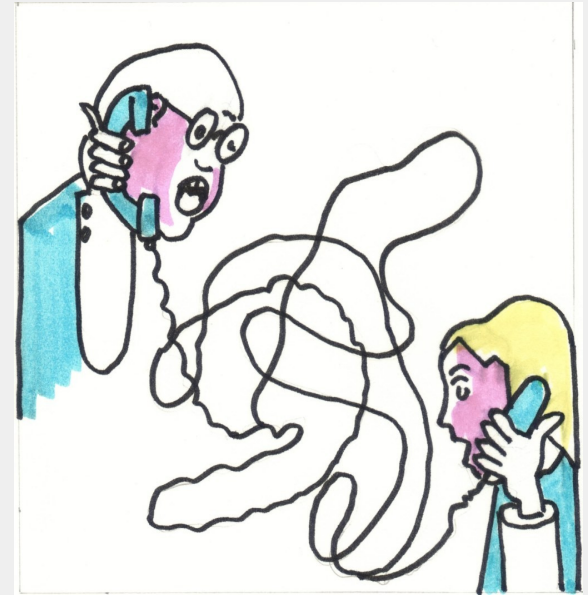
Causes: Fight over Limited Resources

- ▶ Limited number of people (assigned to multiple projects)
- ▶ Limited number of specialists (like DBA's, Testers, etc.)
- ▶ Pulling people out for activities external to any project
- ▶ Fixed resource assignments bind people in the wrong place
- ▶ End-Users not available because of daily business



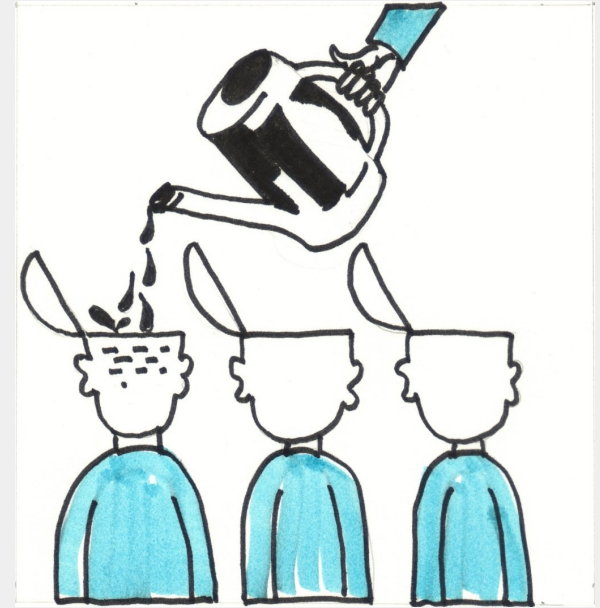
Causes: Communication Breakdown

- ▶ Information propagation takes longer
- ▶ Not all information interesting for all people
- ▶ More information loss
- ▶ Feedback loops get longer
- ▶ Loss of common base with customer
- ▶ Distrust
- ▶ Misunderstanding



Causes: Knowledge Non-Sharing

- ▶ Team isolation
- ▶ Ivory tower
- ▶ Bigger need for documentation
- ▶ Competition
- ▶ “Not invented here” Syndrome
- ▶ No time to share
- ▶ “Runaway” Developers



Causes: Task-Switching

- ▶ Multiple project assignments
- ▶ Multiple task assignments
- ▶ External task injection
- ▶ Bad self-organization
- ▶ Time pressure
- ▶ Too many roles
- ▶ Waste



Causes: Budget Buckets

- ▶ Money used to control
- ▶ Budget = Plan
- ▶ Bureaucracy
- ▶ Resources assigned permanently
- ▶ Dishonesty
- ▶ No transparency



Tools: Fight over Limited Resources

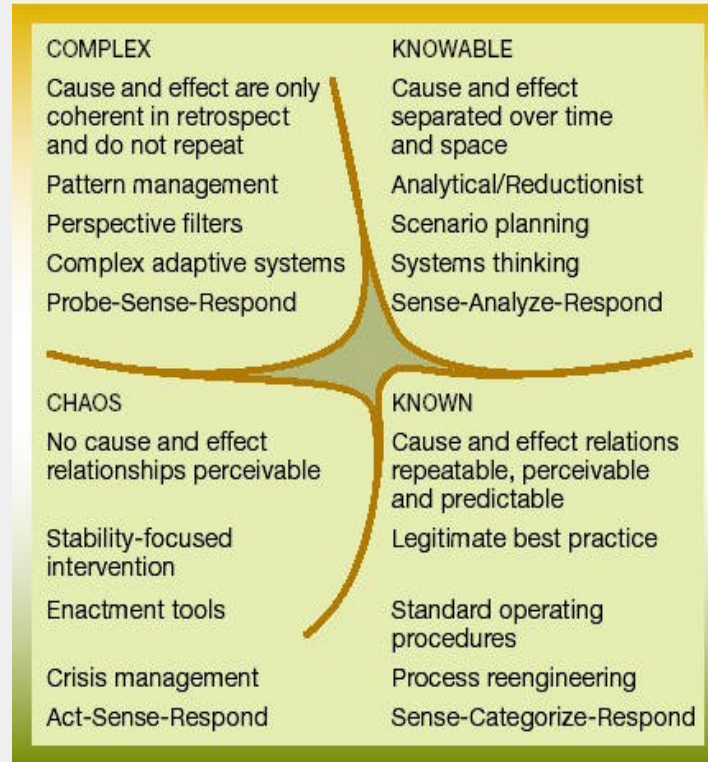
- ▶ Theory of Constraints (Where are limiting constraints)
- ▶ Make side-effects visible
- ▶ From project development to product development
- ▶ Generalize the specialists
- ▶ Add slack (do NOT plan for 100%)
- ▶ Remove outside influences
- ▶ Define a common goal

- ▶ Proximity
- ▶ Isolation
- ▶ Permeability
- ▶ Honesty
- ▶ Transparency

- ▶ Proximity
- ▶ Externalization
- ▶ Education
- ▶ Share common goal

- ▶ Metrics
- ▶ Honesty
- ▶ Trust
- ▶ Honesty

4. What really happens



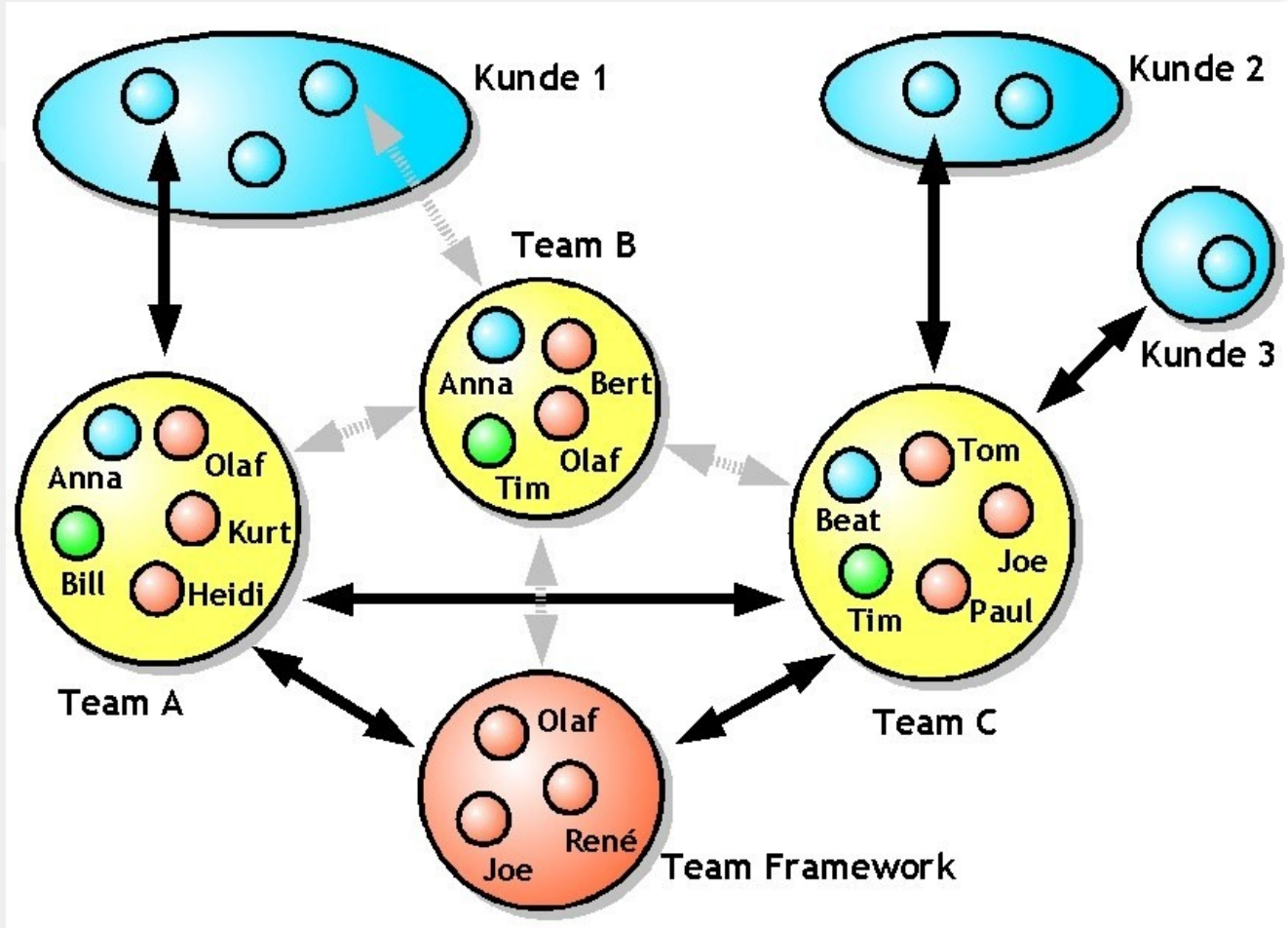
- ▶ Conflicting interests
- ▶ No priorities
- ▶ Politics
- ▶ Fear
- ▶ Ignorance
- ▶ Complex group interactions
- ▶ Errors of the past
- ▶ Corporate culture

Addressing Real Causes

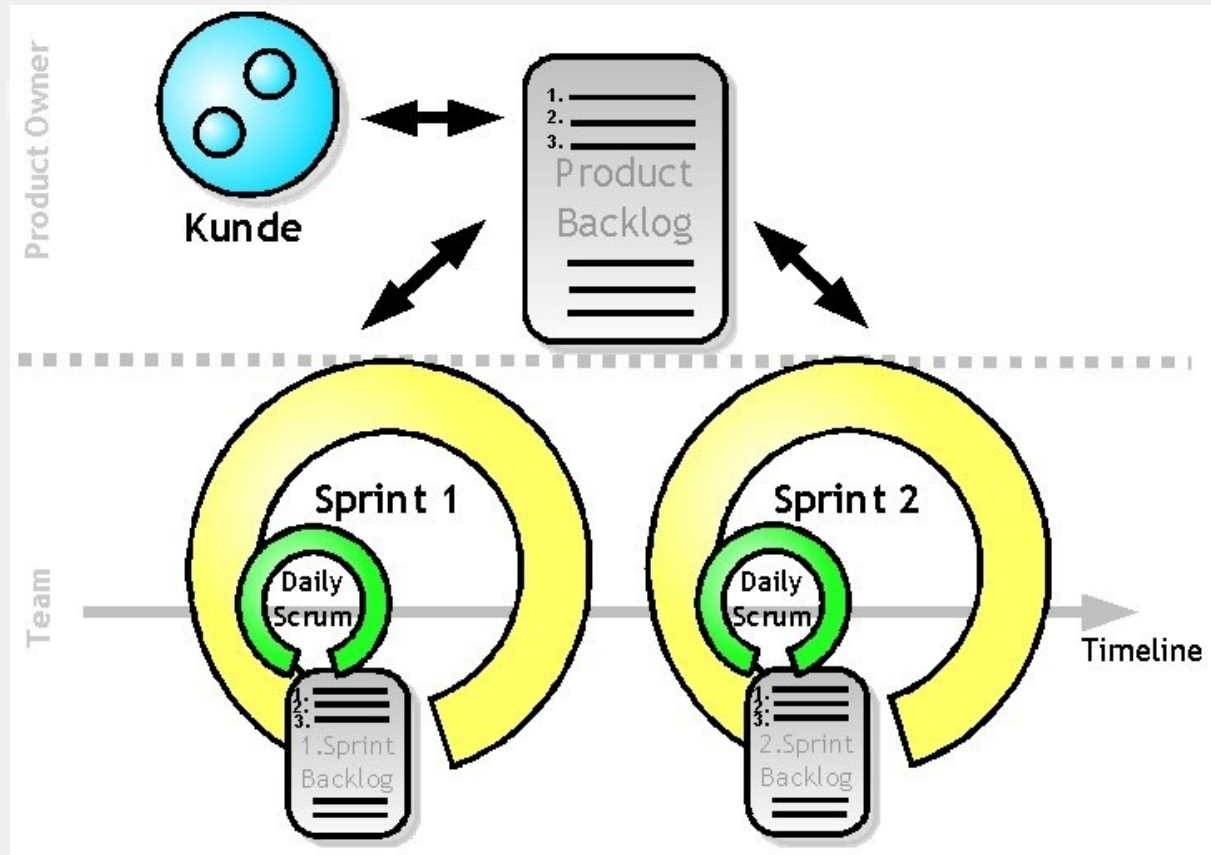
- ▶ Prioritize
- ▶ Educate
- ▶ Simplify
- ▶ Protect
- ▶ Stimulate
- ▶ Network
- ▶ Measure
- ▶ Damping and escalating feedback

- ▶ Probe, Sense, Respond

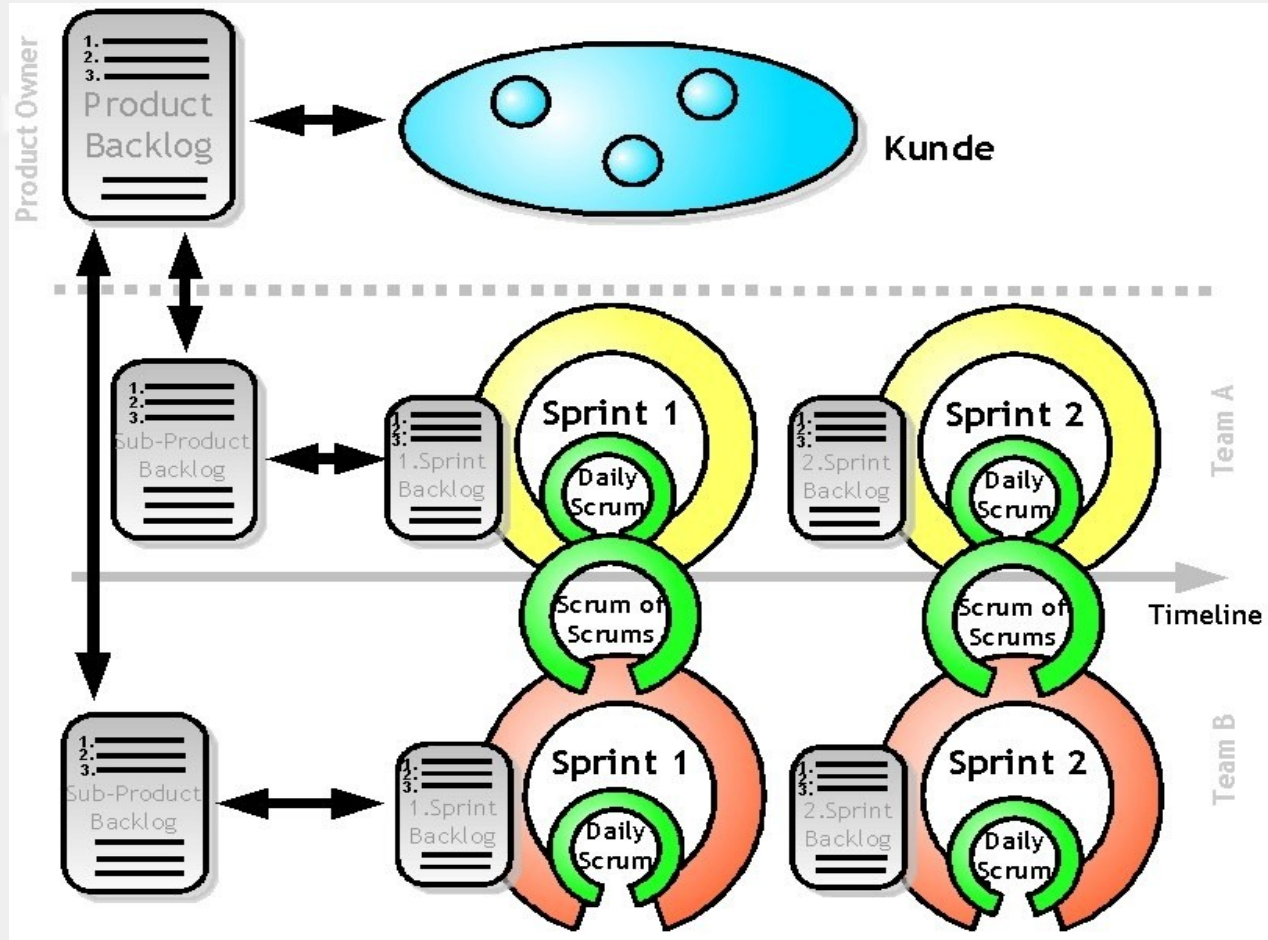
5. What we are doing: Team Development



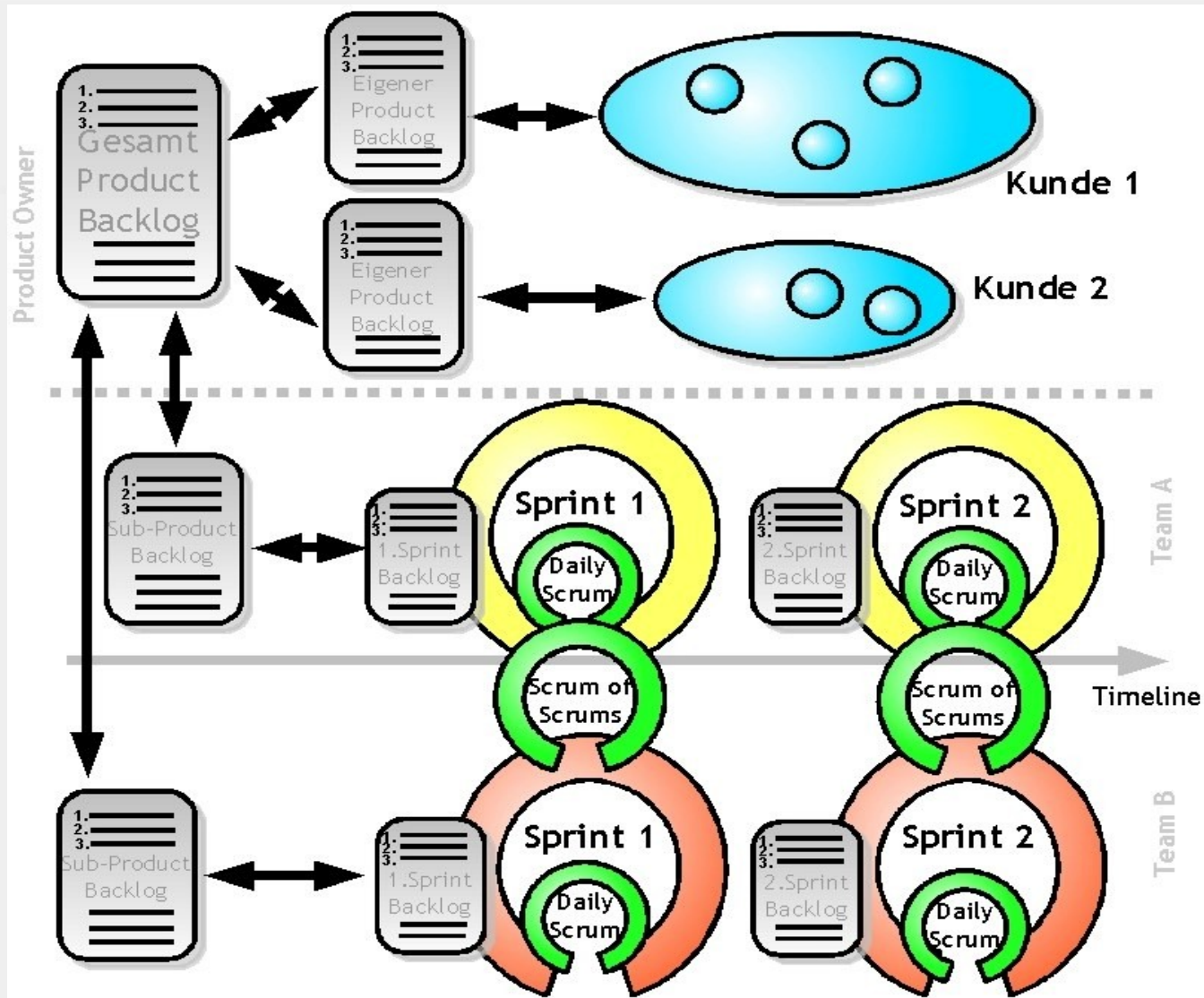
What we are doing: Scrum Scaling I



What we are doing: Scrum Scaling II



What we are doing: Scrum Scaling III



6. Conclusions

- ▶ There are no best practices to guarantee success
- ▶ There are tools that can be applied, but the effect will not always be what we expect it to be
- ▶ Work with negative (damping) and positive (escalating) feedback
- ▶ Instability is normal and desirable, but should be bounded
- ▶ Doing multiple projects in parallel remains hard
- ▶ Try NOT to do it!
- ▶ But if you have to: Use your tools with care.
- ▶ Probe, Sense, Respond



- ▶ For further questions or comments you can reach me at:

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or

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- ▶ **SCRUM**
<http://www.controlchaos.com>
<http://www.mountaingoatsoftware.com>
- ▶ **Lean Software Development (M. & T. Poppendieck)**
<http://www.poppendieck.com>
- ▶ **Managing the Unknowable (Ralph D. Stacey)**
<http://www.amazon.com/exec/obidos/tg/detail/-/1555424635/103-7846170-2148614?v=glance>
- ▶ **Self-Organizing Teams and Knowledge Building**
<http://www.amazon.com/exec/obidos/tg/detail/-/0195092694/103-7846170-2148614?v=glance>
- ▶ **Theory of Constraints (Eliyahu M. Goldratt)**
http://en.wikipedia.org/wiki/Theory_of_constraints
- ▶ **The new dynamics of strategy: Sense-making in a complex and complicated world (C. F. Kurz & D. J. Snowden)**
<http://serendip.brynmawr.edu/bb/pdref.html>



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