

Cracking the Code for Improving the Productivity of Knowledge Workers



Peter Voldby Petersen

pvp@callis.dk

www.callis.dk

Force multiplication!

- ✔ **Force multiplication** refers to a combination of attributes or advantages which makes a given force more effective than another force of comparable size.
- ✔ A **force multiplier** refers to a factor that dramatically increases (hence "multiplies") the effectiveness a group.
- ✔ Some common force multipliers
 - Morale
 - Technology
 - Geographical features
 - Weather
 - Recruitment through diplomacy
 - Training and experience
 - Fearsome reputation
 - Deception

What are the "force multipliers" when talking about improving the productivity of knowledge workers?

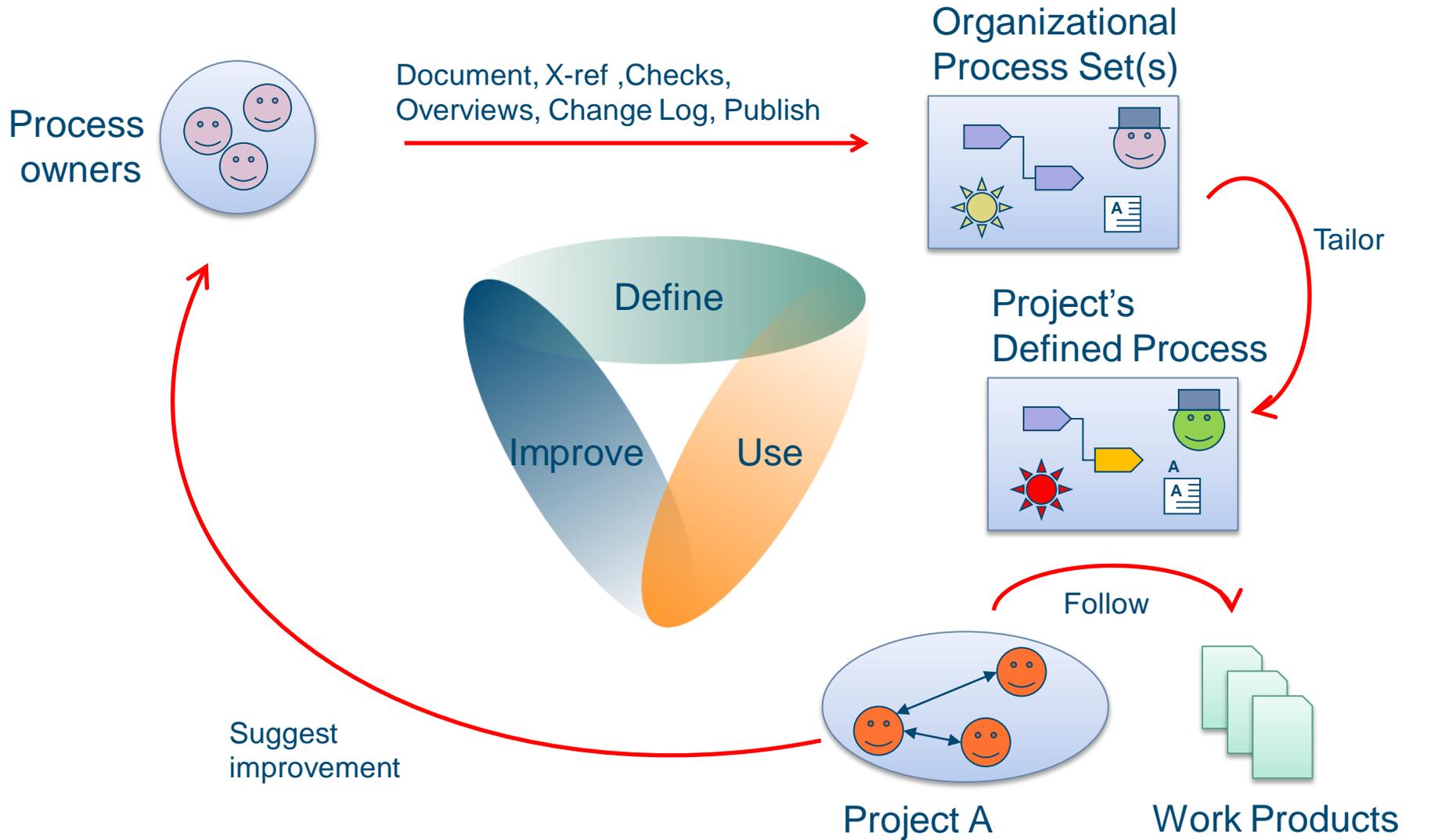


The idea with this presentation

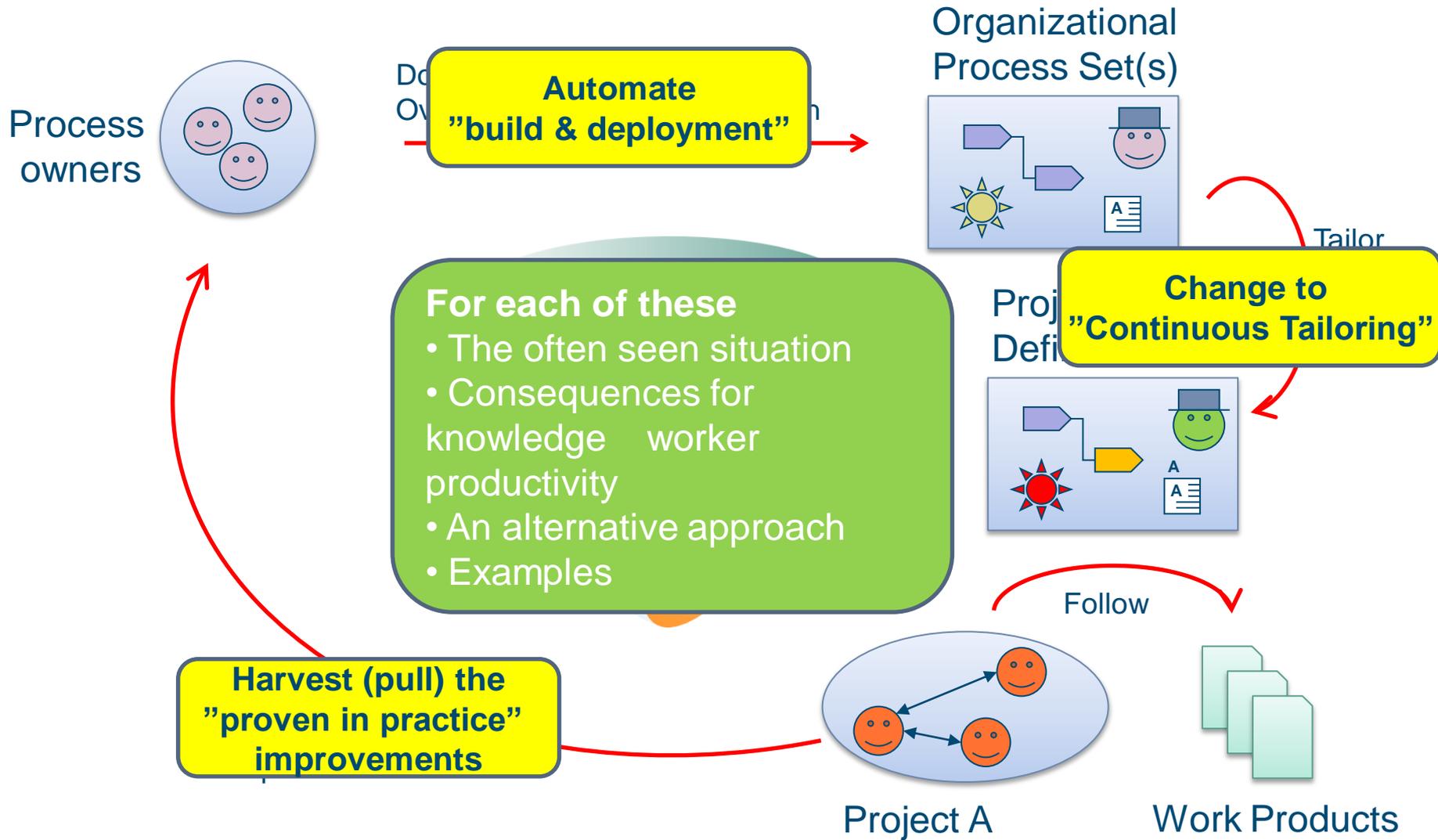
- ❖ The idea is to convey some of our ideas and thoughts about aspects are important related to the **technical infrastructure** supporting process modeling, authoring, tailoring, use, and improvement in **knowledge worker environments**
- ❖ Hopefully, you can use this as inspiration when building, improving or evaluating process infrastructures to make them true **force multipliers** for your organization



(Simplified) Concept of Operation



The Force Multipliers



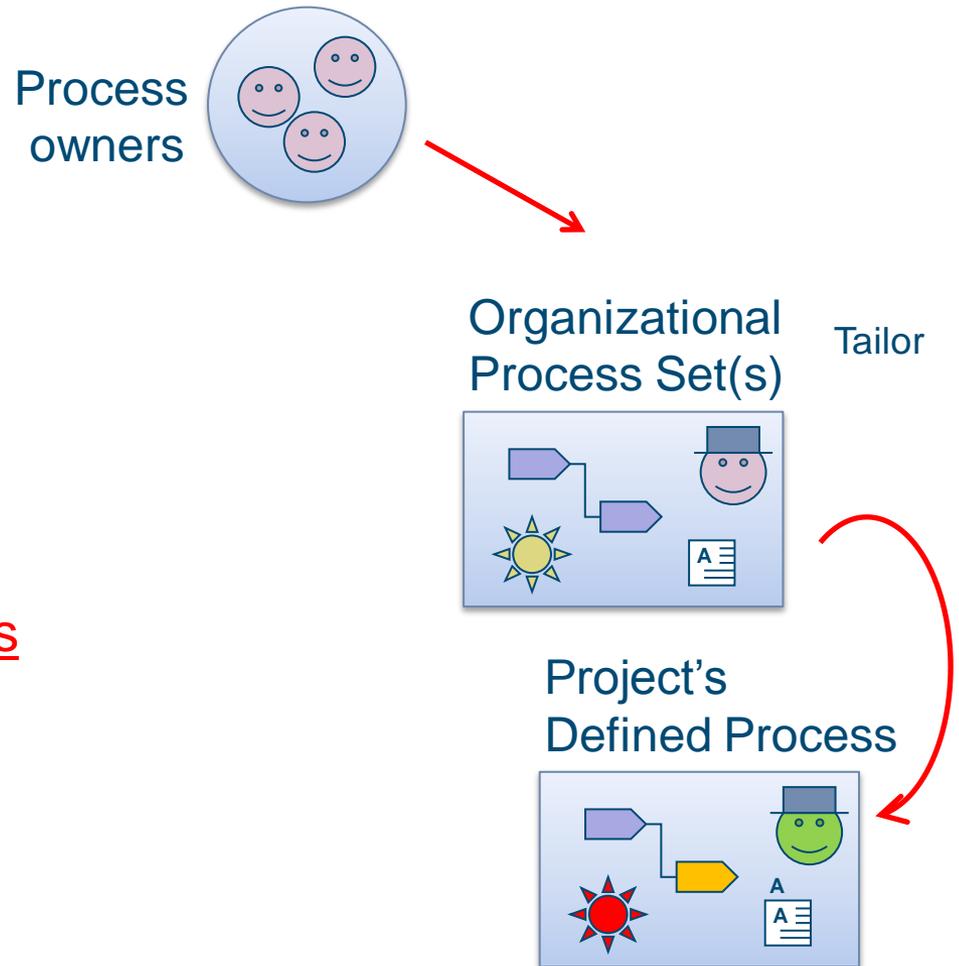
Automate "build and deployment"

Often seen practice

- ❖ Lots of manual work and schedule required to from change to release
- ❖ Resistance to change in process group
- ❖ Bi-yearly releases of process sets

Consequences for Know. Workers

- ❖ Non-optimal presentation of process sets (process group starts to think of "ease of maintaining" instead of "ease of use")
- ❖ Not updated to "real practice"
- ❖ Lower quality of documentation
- ❖ Slows down the "learning loop"

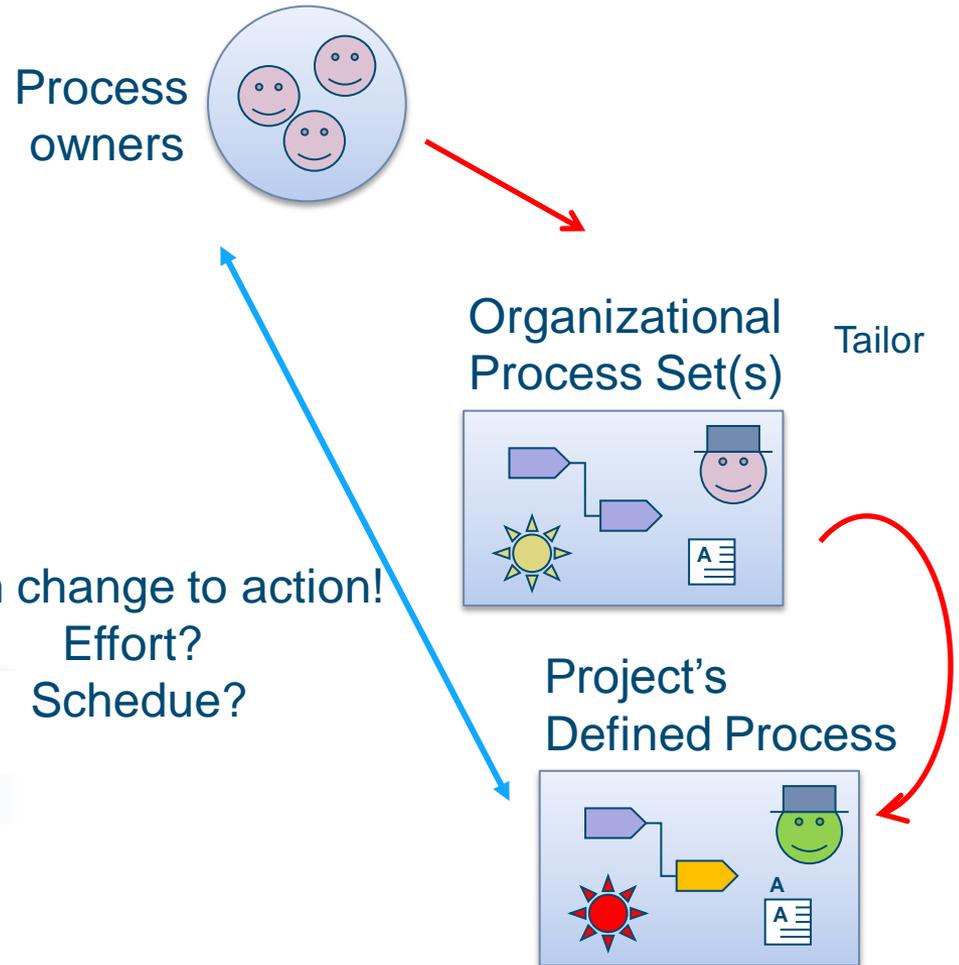
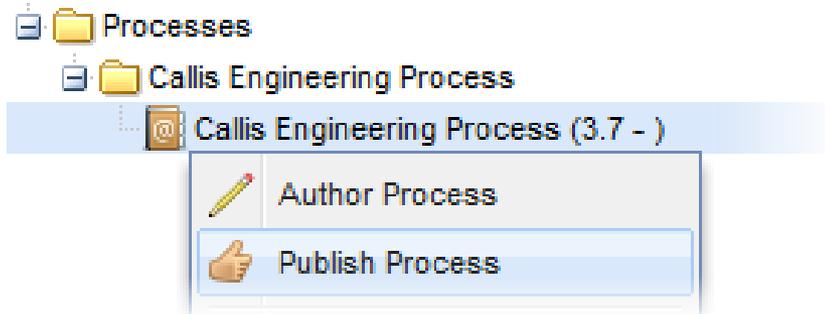


Automate "build and deployment"

An alternative approach

- ✔ Strive towards "Continuous build & deployment" setup
- ✔ "Do things which are hard often"
- ✔ Drive down the effort and schedule required to build & publish

Example



...in less than 5 min...

Change to "Continuous Tailoring"

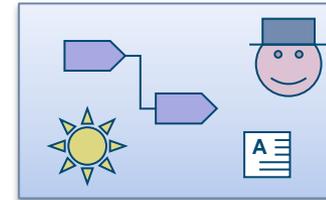
Often seen practice

- ❖ Tailoring by copy-paste process descriptions
- ❖ Tailoring in a file separate from process set
- ❖ Tools where tailoring is practically impossible
 - Yes, we can do that, but it requires an army of consultants and a phd in process modelling

Consequences for Know. Workers

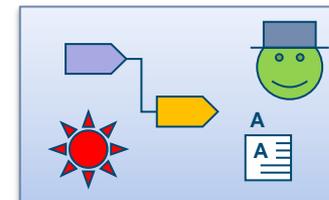
- ❖ Doesn't capture the real process
- ❖ Tailoring turns into a "formal thing"
- ❖ Limited "connection" between documented process and real process – the WIKIs take over...
- ❖ Improvements are not based on existing processes

Organizational
Process Set(s)

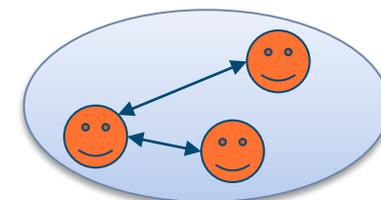


Tailor

Project's
Defined Process



Use



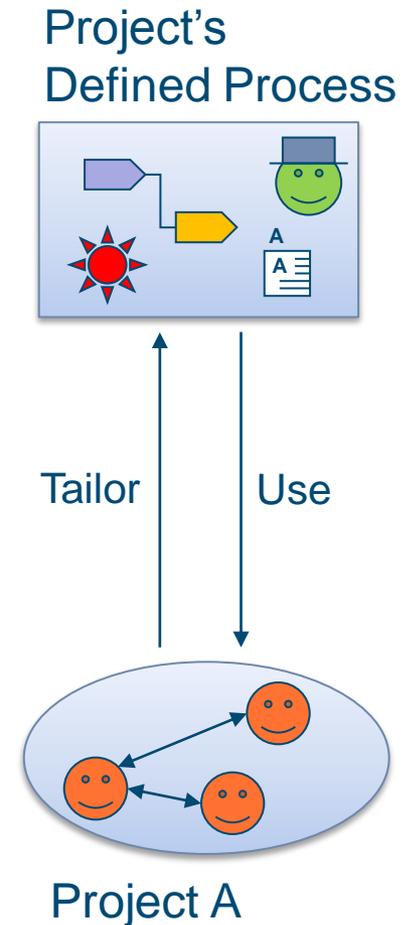
Project A

Change to "Continuous Tailoring"

An alternative approach

- Combine structured processes with wiki approach – "continuous tailoring"
- Make it easy to add operational comments directly into the process set

Example



Change to "Continuous Tailoring"

2	Requirements Manager	Document needs and expectations The needs and expectations should be documented in the Requirements Management Plan .
3	Requirements Manager	Decide which Requirements Management System to use If no special technical or customer related needs mandates the use of a special Requirements Management System , the organizational standard system must be used.
4	Requirements Manager	Prepare specification of project specific setup of Requirements Management System

Document needs and expectations
The needs and expectations should be documented in the [Requirements Management Plan](#).

Decide which Requirements Management System to use
If no special technical or customer related needs mandates the use of a special [Requirements Management System](#), the organizational standard system must be used.

Prepare specification of project specific setup of Requirements Management System

Comment

HTML **B** *I* U ABC [List icons]

We need to use RM-Pro in our project - this is a part of the contract with the customer

Low ceremony
Empowers people
Practical project learning

Project E | 2009.11.03 13:28 by pvp

2 [Requirements Manager](#) **Document**
The needs a
Management

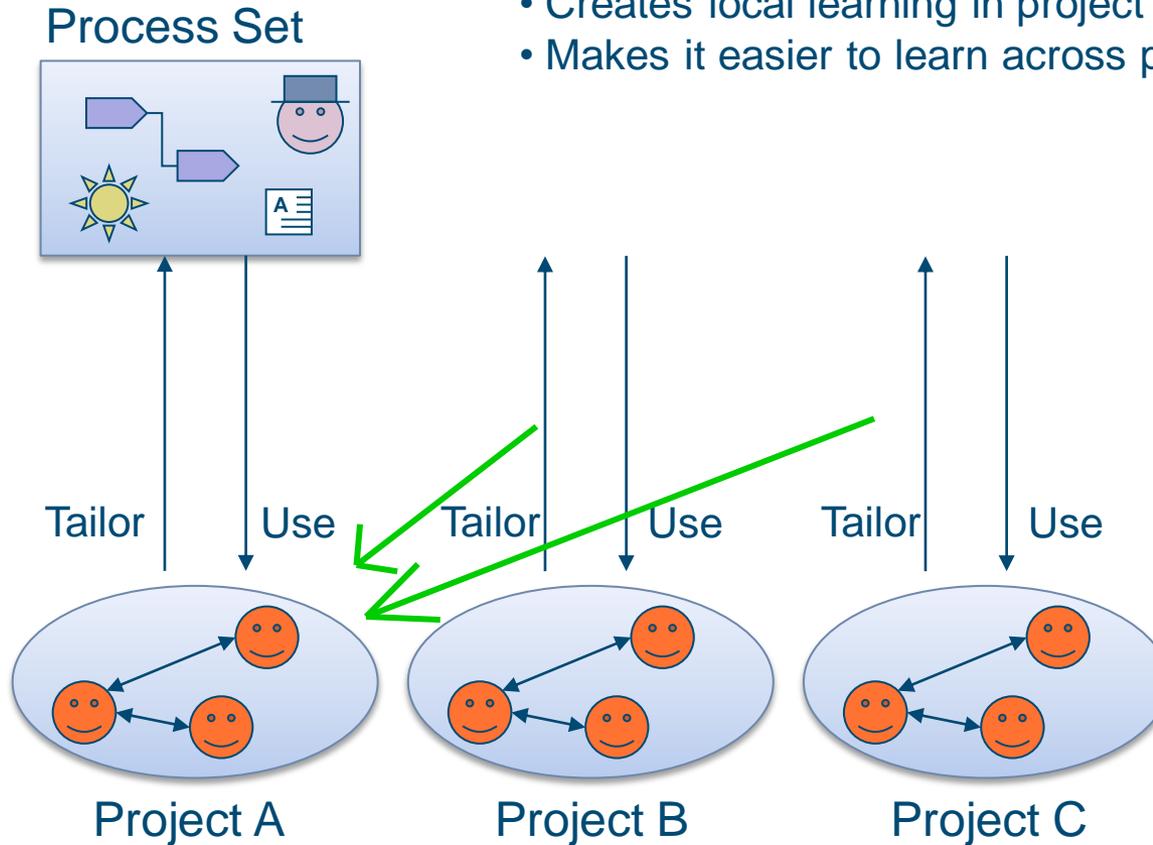
3 [Requirements Manager](#) **Decide whi**
If no special
Requirements
used.

4 [Requirements Manager](#) **Prepare specification of project specific setup of Requirements Management System**

Learning Across Projects

Short circuit knowledge generation

- Creates local learning in project
- Makes it easier to learn across projects



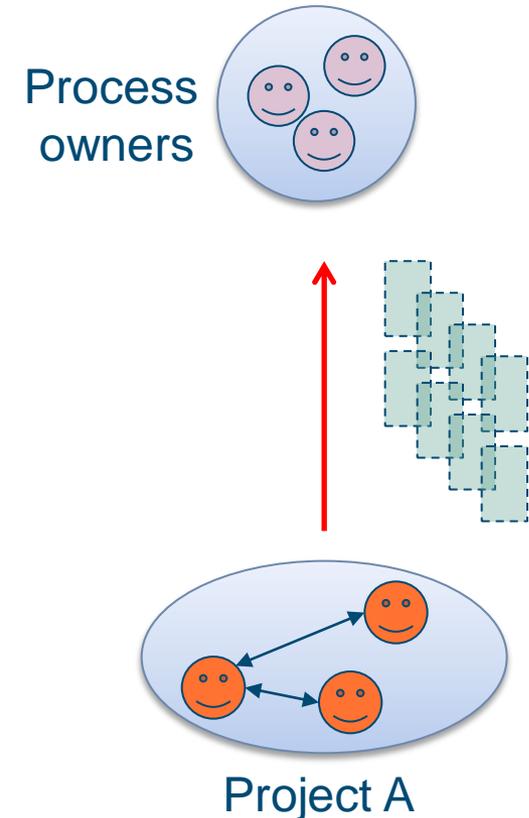
Harvest (pull) the "proven-in-practice" improvements

Often seen practice

- Employee "push" improvement suggestions to a queue
- Hard to see the "quality" of the improvement suggestion
 - Theory or "proven in practice"
- Improvement suggestions queue up, action slows down
- Learning loop does not work

Consequences for Know. Workers

- "The EPG / process owners don't do anything"
- Outdated process descriptions
- Slow/limited build-up of intellectual capital

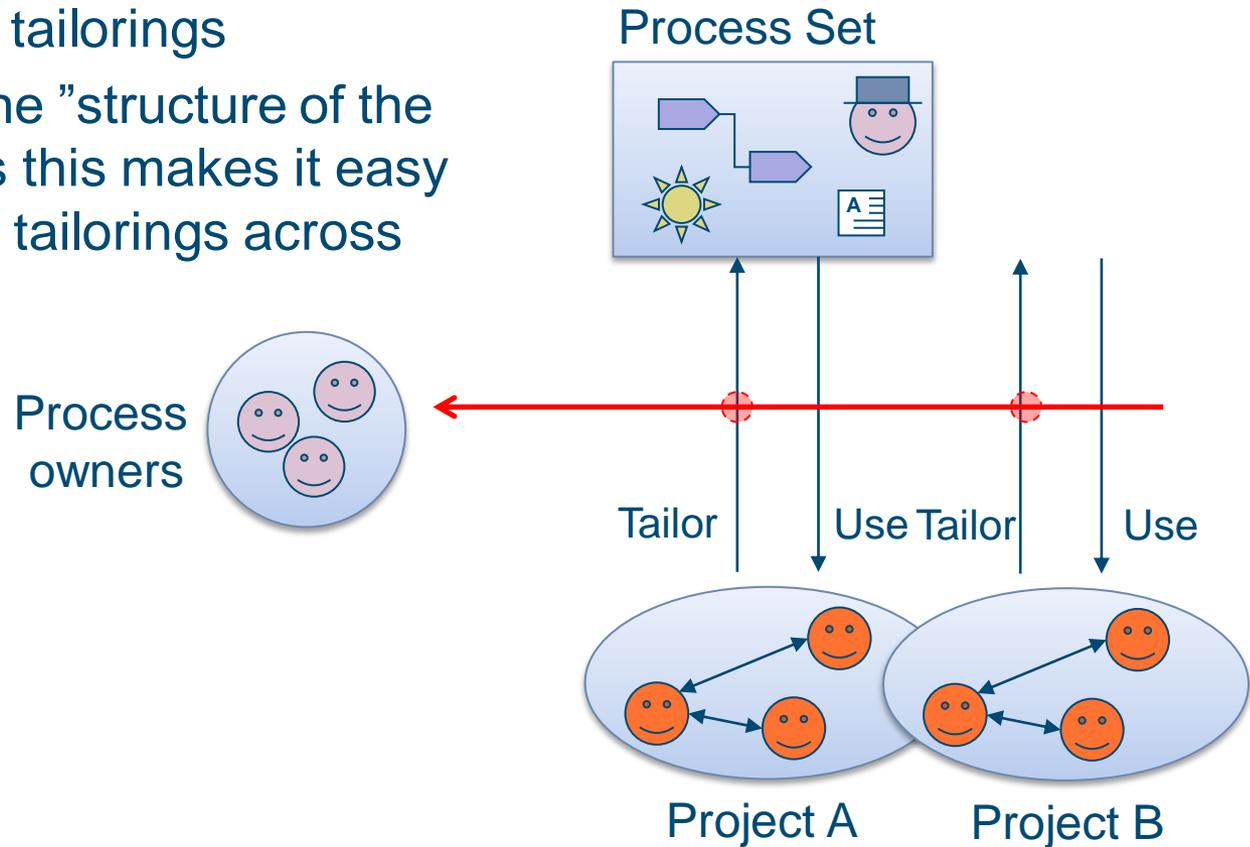


Harvest (pull) the "proven-in-practice" improvements

An alternative approach

- ✔ "Pull" the "proven-in-practice" operational tailorings
- ✔ Do this in the "structure of the process" as this makes it easy to compare tailorings across projects

Example



Harvest (pull) the "proven-in-practice" improvements

 Establish Requirements Management System

Summary
Coordinate setup of RMC

Main Desc
This task describes the setup of the Requirements Management System (RMS).

Entry Criteria
Check this out

Steps

#	Role	Description
1	Req Manager	
2	Requirements Manager	Document needs and expectations The needs and expectations should be documented in the Requirements Management System (RMS). As we are doing internal product development with no access to end users, our product manager will...
3	Requirements Manager	Decide which Requirements Management System to use If no special technical or customer related needs mandates the use of a specific Requirements Management System, the organizational standard system should be used. In Project B we need to use this system... Project B 2009.11.03 14:04 by pvp We need to use RM-Pro in our project - this is a part of the contract with the customer Project E 2009.11.03 14:03 by pvp

Search Comments
Modified after: 2009.11.03
Search

Modified	User	Project	Comment	Element
2009.11.03 14:04	pvp	Project B	As we are doing internal product development with no access to end users, our product manager	
2009.11.03 14:04	pvp	Project B	In Project B we need to use this system...	
2009.11.03 14:03	pvp	Project E	We need to use RM-Pro in our project - this is a part of the contract with the customer	

Oversee tailorings across multiple projects

See the tailoring in the process description

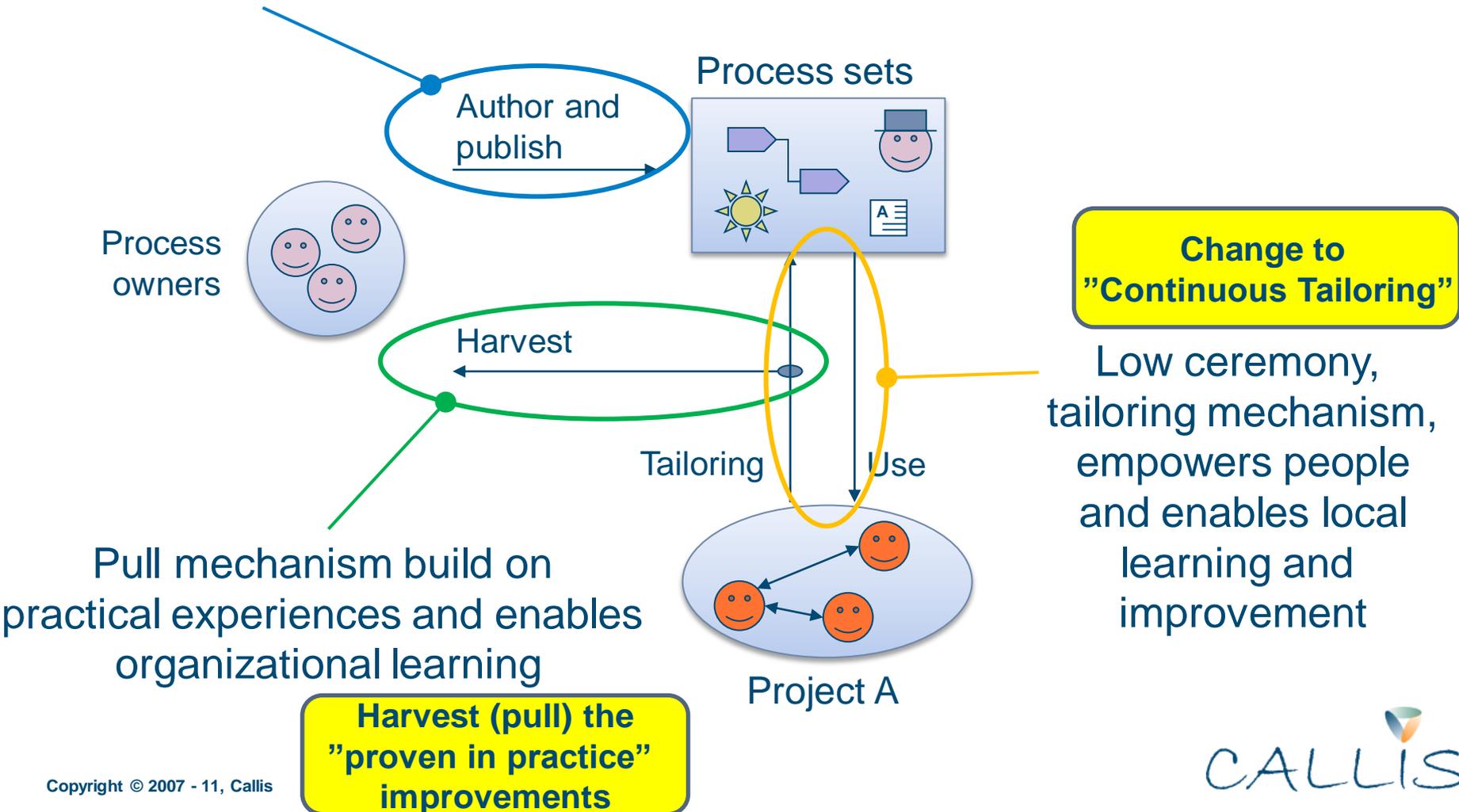
- Requirements Manager
- Accountable
- Project Manager
- Consulted
- Test Manager



The new "Concept of Operation"

Automated "model, author, build, and publish" mechanism

**Automate
"build & deployment"**



Thank you!



📧 Please contact pvp@callis.dk for demos and trials

- Or just to discuss the concepts 😊

Backup slides from here

Stuff you need to address...

- ✔ Well defined process architecture supporting re-useable process content / method libraries
- ✔ Automated consistency checking
- ✔ Generate and/or integrate graphics (MS Visio AddIn)
- ✔ Multi-model compliance mapping / cross referencing
- ✔ Multiple views, multiple variants, multiple output formats
- ✔ Activation – e.g. instantiating roles and best practices (MS Sharepoint integration)
- ✔ Lightweight tailoring / operationalization
- ✔ Understand tailoring across projects
- ✔ Profiling use of processes
- ✔ Automated compare (diff) process definitions / change list

Supporting knowledge workers is supporting the lifecycle of processes!

Organize, structure, and author process sets

Manage compliance to standards and requirements

Consistency and uniformity (in text and graphics)

Automated publishing of multiple versions

Compare process sets

Effective access to process sets and assets

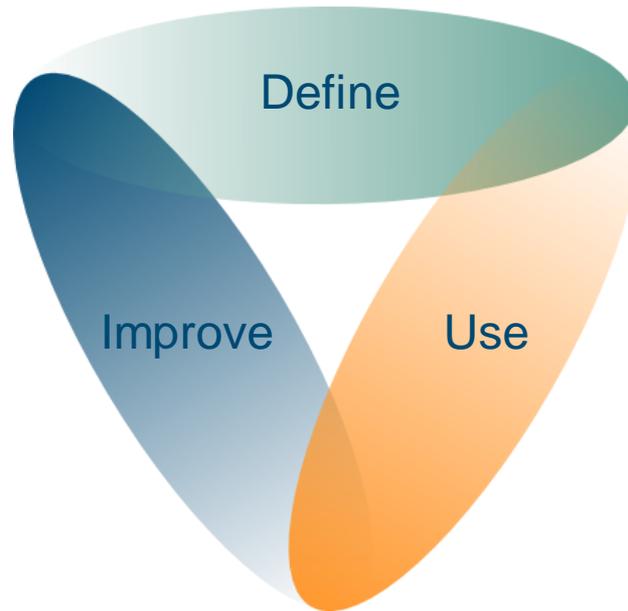
Understand tailoring across projects

Lightweight and practical tailoring

Profile use of process sets

Integrate best practices

Activate the process, e.g. artifact and role instantiation



From Process Modelling to Process Execution

