

apply

reuse

create

<https://ProcessesasRequirements.info>



Systematic

Software-

Engineering

Wiederverwendungspotential bestmöglich nutzen Wiederverwendung - schneller, mehr, besser



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Worum geht's?

- ✓ Prozesse sollten wie ein **Exoskelett** sein, das den Teams hilft.
- ✓ Prozesse entstehen aus **Best Practices**, dokumentierter Erfahrung.
- ✓ Oft wachsen sie endlos und werden ein schwerer **Rucksack**.
- ✓ Wenn Prozesse **Mehraufwand** statt **Hilfe** sind, dann stimmt was nicht.

- ✓ „**was**“ getan werden soll, wird schon lange als Anforderungen gesehen.
→ Produkt (Lastenheft, System- und Software-Anforderungen)
- ✓ „**wie**“ das „was“ gemacht werden soll, sind auch Anforderungen!
→ Projekt (Regelwerke, Standards, Prozesse, Work Instructions)

- ✓ Also warum nicht auch **beides** als Anforderungen behandeln?



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Prozesse paketweise als Anforderungen definieren, um sie nach Bedarf wiederverwenden zu können.

The screenshot displays the 'ease solutions' software interface. On the left, a tree view shows a project structure under 'PaR Corporate Processes'. The tree includes folders for '1) RFQ', '2) A-Sample', '3) B-Sample', '4) C-Sample', '5) D-Sample', '6) Team Building', and '7) Templates'. Under '1) RFQ', there are sub-folders for '1.1) RFQ Project Organization', '1.2) RFO Project Scoping', and '1.3) RFQ Requirements Elicitation'. The '1.3) RFQ Requirements Elicitation' folder is expanded, showing several requirement items, with 'PARCP-5 RFQ V1 Obtain requirements from customer' selected. An orange box highlights this folder, and an arrow points from it to the detailed view on the right.

The detailed view on the right shows the requirement 'PARCP-5 RFQ V1 Obtain requirements from customer'. The 'Details' section includes:

- Path: PaR Corporate Processes/RFQ/RFQ Requirements Elicitation/PARCP-4
- Issue Type: **C COP** (highlighted with an orange box)
- Resolution: Unresolved
- Assignee: Unassigned
- Created: 2020-12-09 11:05:00
- Updated: 2022-11-22 14:27:55
- Labels: None

The 'Description' section contains the following text:

Obtain requirements through direct solicitation of customer input, through review of customer proposals (where relevant) and through stakeholder interviews.

Gather all inputs and define them as initial version.

Inform internal managers and customer stakeholders about this initial status.

The 'Attachments' section is empty. The 'Child Requirements' section is empty. The 'Issue Links' section shows 'is refined by' and 'reuses to'.

The 'is refined by' section shows:

- R PARREG-1 SYS.1.BP1: Obtain stakeholder requirements and requests. (DRAFT) Compare

The 'reuses to' section shows:

- C PARBS-46 RFQ V1 Obtain requirements from customer (DRAFT) Compare

The 'Revisions' and 'Comments' sections are empty.



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Firmenprozesse als Anforderungen mit **C COP** Item Type definieren.

Verlinkung auf das Regelwerk (nächste Folie) und auf die Wiederverwendung im Projekt.

Auch Standards und Regelwerke als Anforderungen definieren, um einen ganzheitlichen und leicht verfolgbaren Ansatz zu erhalten.

The screenshot displays the 'ease solutions' software interface. On the left, a tree view shows a hierarchy of requirements, with 'PaR Regulations' and 'VDA' highlighted. The main panel shows the details for 'SYS.1.BP1: Obtain stakeholder requirements and requests.' The 'Issue Type' is 'R REG', and the 'Status' is 'Draft'. The 'Description' section contains text about stakeholder requirements elicitation and three notes. Below the description, there are sections for 'Attachments', 'Child Requirements', and 'Issue Links'. The 'Issue Links' section shows a list of related requirements, including 'PARREG-13 SYS.1 1) stakeholder communication' and 'PARREG-8 SYS.1 4) continuous monitoring of needs'.



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Regelwerke als Anforderungen mit **R REG** Item Type definieren.

Verlinkung in alle Richtungen mit verschiedenen Typen möglich

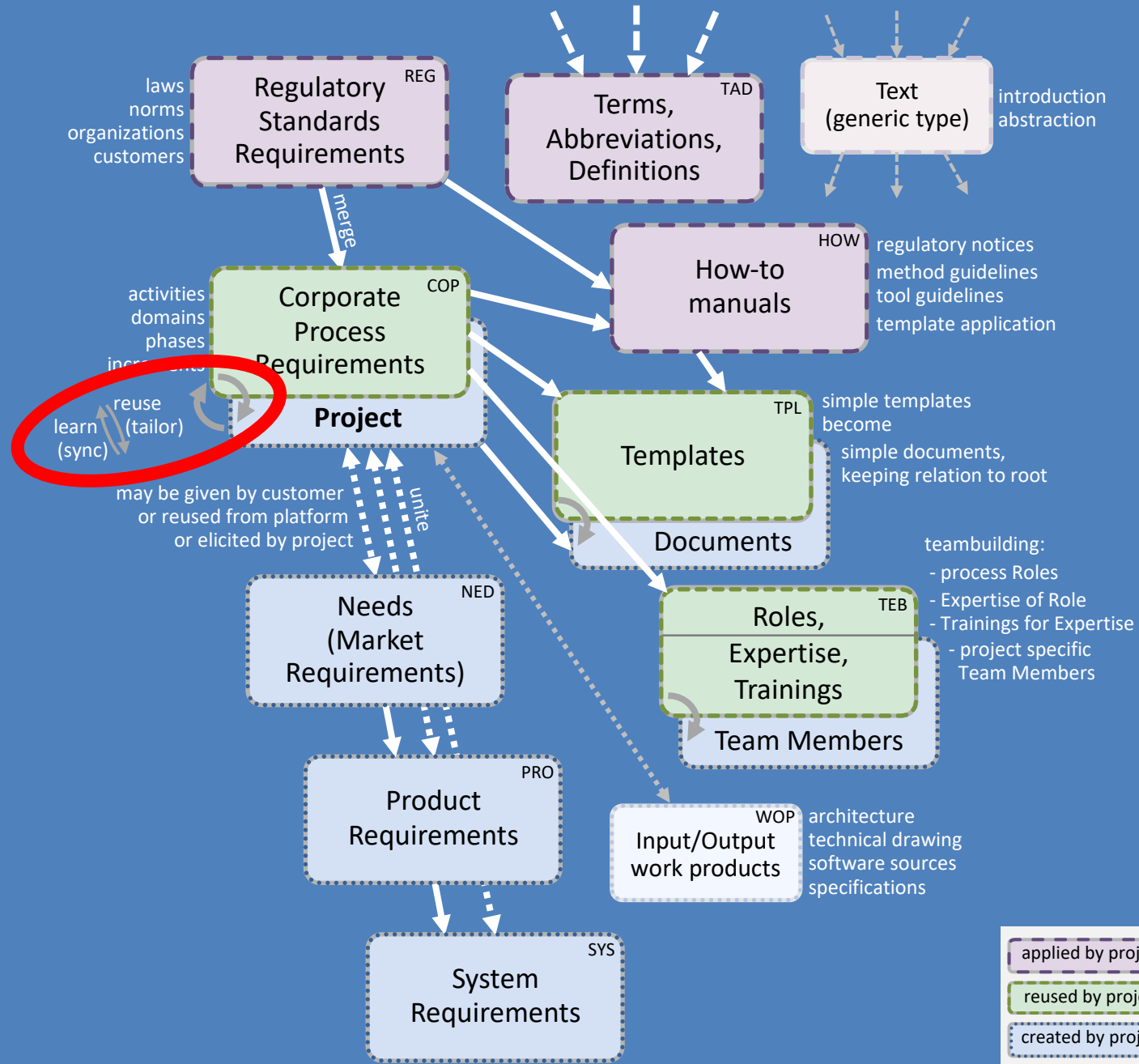
PaRis

detailed

Some requirements are simply **applied by projects** without change, for detailed lookup or guiding help.

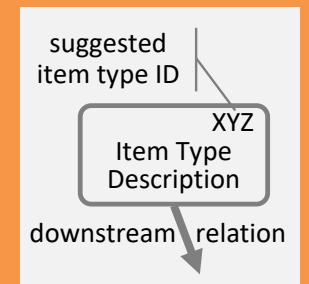
Other requirements are rather inputs to be **reused by projects**, also to be modified or extended.

Reused items, like specific work products, finally become items that are **created by projects**.



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Wiederverwenden (Reuse) von Prozessteilen

Wiederverwenden (Reuse) von Prozessteilen als Anforderungen, die Grundlage für jede Prozessplattform

bei **R4J in Jira** über Copy/Paste-Ansatz

Reuse Issues

Manual Configuration

Predefined Rules

Create folder structure only

Yes No

If checked, the folder structure will be created in the target without issues.

Insert issues as new record

Yes No

If set to NO then issues will only be linked to the tree. This option is only enabled if the destination is in a different project.

Create link to new issues

Yes No

Create a link from the source to the copied issues.

reuses

Fields to copy

Description × Labels × Deadline × Directions ×
Explanation × Linked Issues × Variation Point ×

These fields will be copied to the new issues. The summary is always included.

Include attachments

Yes No

Include to copy all attachments of the copied issues.

Include sub-tasks

Yes No

Include to copy all sub-tasks of the copied issues.

Include related items

Yes No

Include directly linked issues in the reuse.

Paste

Cancel



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Wiederverwenden (Reuse) von Prozessteilen

bei **Jama** über dedizierte Funktionalität für Reuse und für Sync, wenn schmutzig geworden



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Reuse Item(s)

Select source item(s): KoDeCs PaR Process Platform

How do you want to reuse these items?

Reuse Options View: Basic Advanced

- Sync item(s) and share Global ID
- Append a prefix
- Add a relationship from the original item
- Include all tags, attachments, and links
- Do not include relationships outside of the source selection
- Include relationships from the source selection
- Include related items and mirror relationships

Select a target destination: KoDeCs PaR Project "Setup BMS Platform"

- Reuse source project hierarchy in destination project
- Manually select location(s) for reused item(s)

DIRECTIONS:

- reuse the complete Corporate Standards process (e.g. "Automotive Supplier Process") and rename it to become the project
- assign the people to the roles

ID	Global ID	Name	Project	Sync Status
K_PaR-K_COP-15	GID-56127	RFQ: Instantiate Project	KoDeCs - Processes as Requireme...	(Current Item)
K_PaR-K_COP-7	GID-56127	RFQ: Instantiate Project	KoDeCs - Processes as Requireme...	Out Of Sync

Synchronize changes to this item

Reuse and Sync Cancel

- REG (Regelwerke)
 - R.1 Gesetze
 - R.2 Standards (allgemein)
 - ZRP-859 R.2.1 ISO 15288 (Systems and Software Engineering)
 - ZRP-1065 R.2.2 ISO 27001 (Information Security Management)
 - ZRP-908 R.2.3 Scrum (agile Organisation)
 - R.3 DWA (Wasserwirtschaft)
 - ZRP-78 R.3.1 DWA-M 151 (MDMS)
 - ZRP-1707 R.3.1.1 Begriffsdefinitionen
 - ZRP-1724 R.3.1.2 Anforderungen
 - ZRP-1726 R.3.1.2.1 Systemarchitektur
 - ZRP-1723 R.3.1.2.2 Datenbanksystem
 - ZRP-1725 R.3.1.2.3 Metadaten
 - ZRP-1722 R.3.1.3 Personal
 - ZRP-943 R.3.2 DWA-M 181 (Messung)
 - ZRP-71 R.3.3 DWA-M 1060 (IT-Sicherheit)
 - ZRP-948 R.3.4 DWA-M 260 (Visualisierung und Auswertung)
 - ZRP-63 R.3.5 DWA 198 (Bemessungswerte)
 - R.5 (Interne Regelungen)
- TAD (Glossar)
- COP (Geschäftsprozesse)
 - ZRP-978 C.0 Prozessdefinition
 - ZRP-974 C.1 ZRP betreiben
 - ZRP-973 C.2 ZRP entwickeln
 - ZRP-933 C.2.1 Konzept erstellen
 - ZRP-852 C.2.2 Anforderungen analysieren
 - ZRP-853 C.2.3 Architektur designen
 - ZRP-994 C.2.3.1 Design planen
 - ZRP-995 C.2.3.2 Komponenten identifizieren
 - ZRP-996 C.2.3.3 Struktur definieren**
 - ZRP-997 C.2.3.4 Verhalten definieren
 - ZRP-998 C.2.3.5 Anforderungen ableiten
 - ZRP-999 C.2.3.6 Alternativen bewerten
 - ZRP-1000 C.2.3.7 Eigenschaften definieren
 - ZRP-855 C.2.4 Produkte verwenden
 - ZRP-854 C.2.5 Software entwickeln

Zeitreihenplattform Enterprise Level / ZRP-996 C.2.3.3 Struktur definieren

Reject Accept Edit

Path: Zeitreihenplattform Enterprise Level/COP (Geschäftsprozesse)/ZRP-973/ZRP-853

Details

Status: **PAR REVIEWED** Lösung: Unresolved
 Erstellt: 2022-01-15 10:37:36 Aktualisiert: 2022-11-15 13:32:17
 Stichwörter: None

Description

- Zusammenhänge zwischen den identifizierten Komponenten aufzeigen und dokumentieren, um isolierte und abhängige Aspekte zu trennen.
- Technische Schnittstellen definieren (z.B. Parameter, Signale, Verbindungen), um die Zusammenhänge technisch greifbar und testbar zu gestalten.
- Zusammenhänge zur Umgebung (z.B. Fremdanwendungen) identifizieren und definieren.
- Schnittstellendefinitionen in separatem Zeitfenster mit Vorlauf zur Umsetzung planen, um Abhängigkeiten identifizieren und Implementierung bzw. Änderungen frühzeitig planen zu können.

Attachments

Child Requirements +

Issue Links

relates to

ZRP-942 C.2.1.9 Schlüsselanforderungen ableiten = PAR REVIEWED Compare

is derived from

ZRP-877 R.2.1.4.3 Schnittstellen identifizieren = PAR ACCEPTED Compare

ZRP-924 R.2.3.4.1 The Sprint = PAR ACCEPTED Compare

ZRP-1726 R.3.1.2.1 Systemarchitektur = PAR ACCEPTED Compare

is satisfied by

ZRP-1179 A.GK.ZRP.4.1.1 Schnittstellen = PAR ACCEPTED Compare



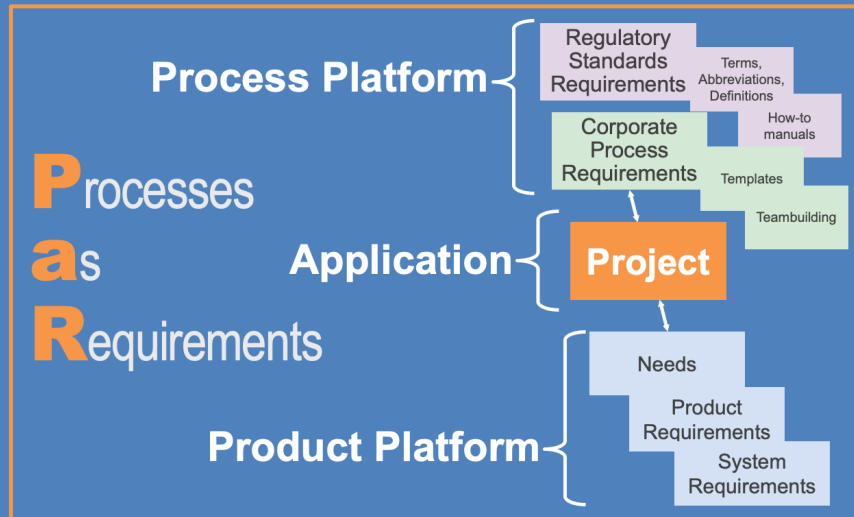
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Beispiel aus einem anderen komplexeren Umfeld (KRITIS):

Eine Aktivität, die sich bei 3 Regelwerken bedient.

PaR The Splash “Platform”



When you design “**P**rocesses **a**s **R**equirements” (**PaR**), variability management can create a process platform from these process requirements, just like the product requirements of your product platform.

The projects apply both in a united fashion, solving an old problem of project planners also (setting up a combined schedule from process and from product requirements).

When the process requirements have some variability defined by a variation point, then the project must make a decision and thereby bind the designed variability to a dedicated variant.

That’s it how variability management in Product Family Engineering works. Some requirements engineering tools already start supporting this directly, but also additional tooling is available as help, and it also can be done manually somehow.



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PaR Versions vs. Variants

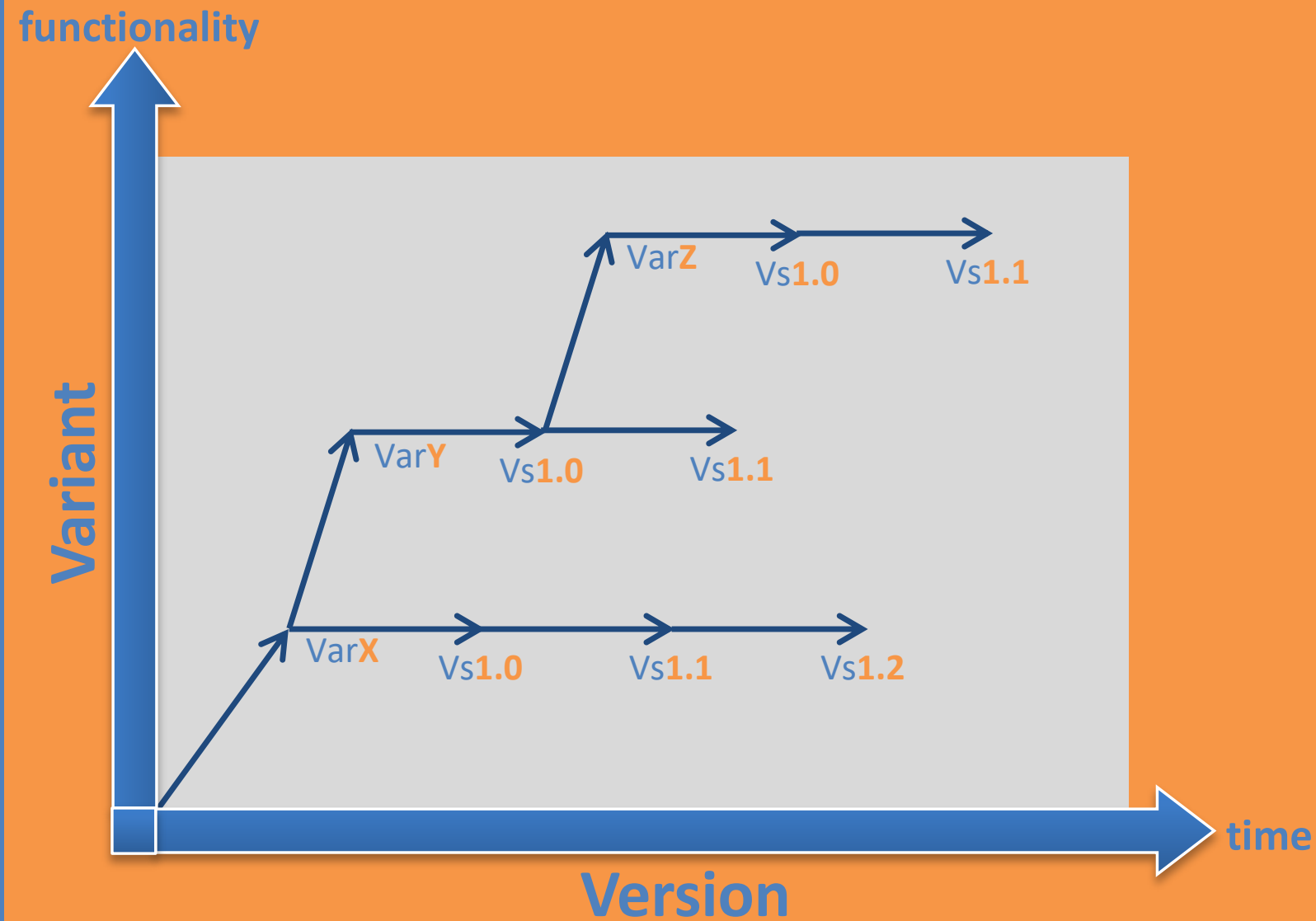


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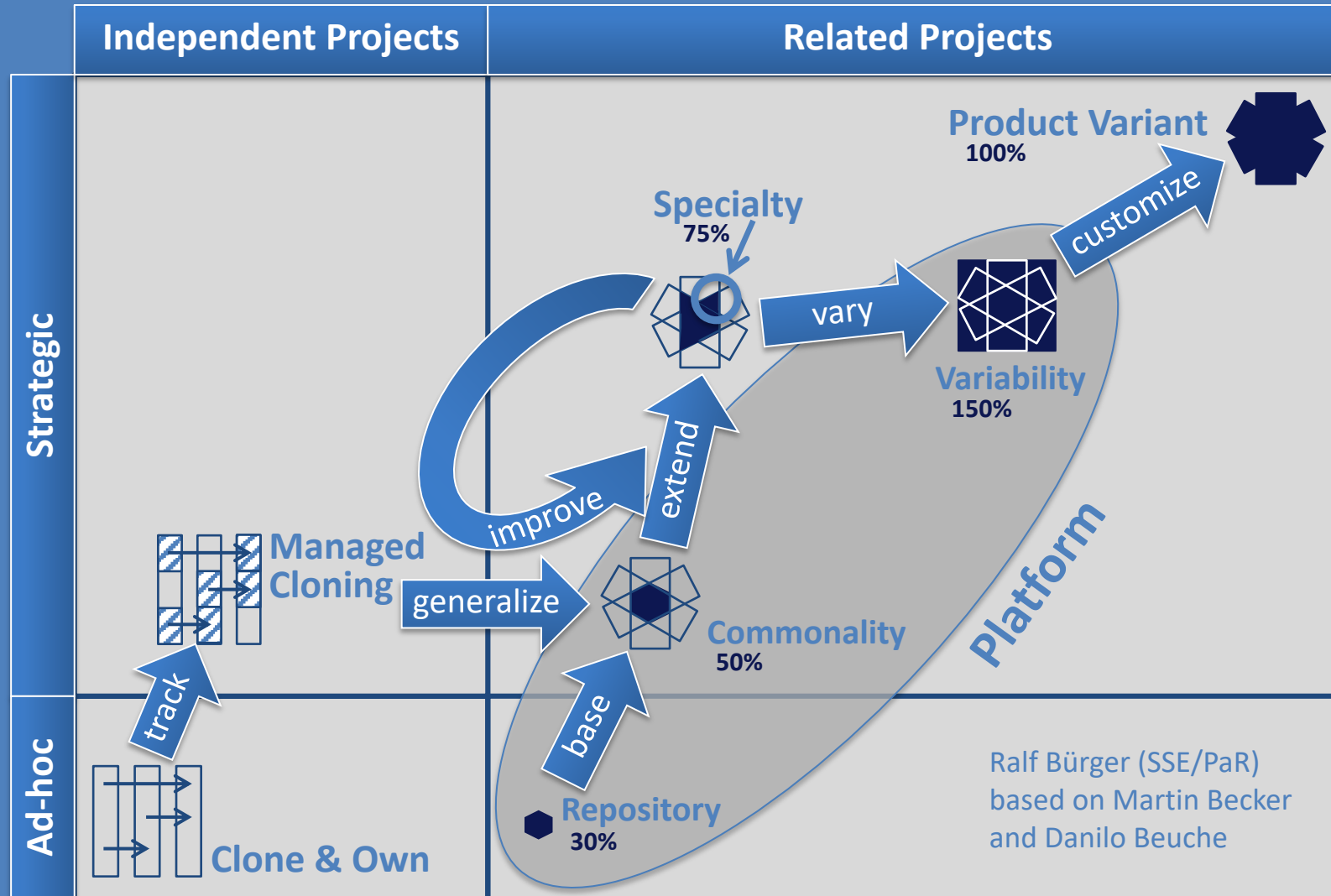
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PaR Evolution of platforms



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The screenshot displays the KoDeCs PaR Product Platform interface. On the left, a tree view shows a hierarchy of requirements under '1.2.2.2 AC charging'. A red box highlights the requirement '1.2.2.2 The battery shall be chargeable via AC up to x kW.', with a red arrow pointing to its detailed view on the right. The detailed view shows the following information:

- PROJECT ID:** BMS-K_PRO-5
- GLOBAL ID:** GID-56097
- NAME:** The battery shall be chargeable via AC up to x kW.
- VARIATION POINT:** alternative
- DESCRIPTION:** -
- SAFETY LEVEL:** QM
- RELEASE:** -
- TAGS:** Variation Point

At the bottom, a table lists four variation points:

ID	Name	Variation Point
BMS-K_PRO-21	V1: The battery shall be chargeable via AC up to 11 kW.	none
BMS-K_PRO-22	V2: The battery shall be chargeable via AC up to 22 kW.	none
BMS-K_PRO-23	V3: The battery shall be chargeable via AC up to 16.5 kW.	none
BMS-K_PRO-24	V4: The battery shall be chargeable via AC up to 7.3 kW.	none

Variation Point(2)



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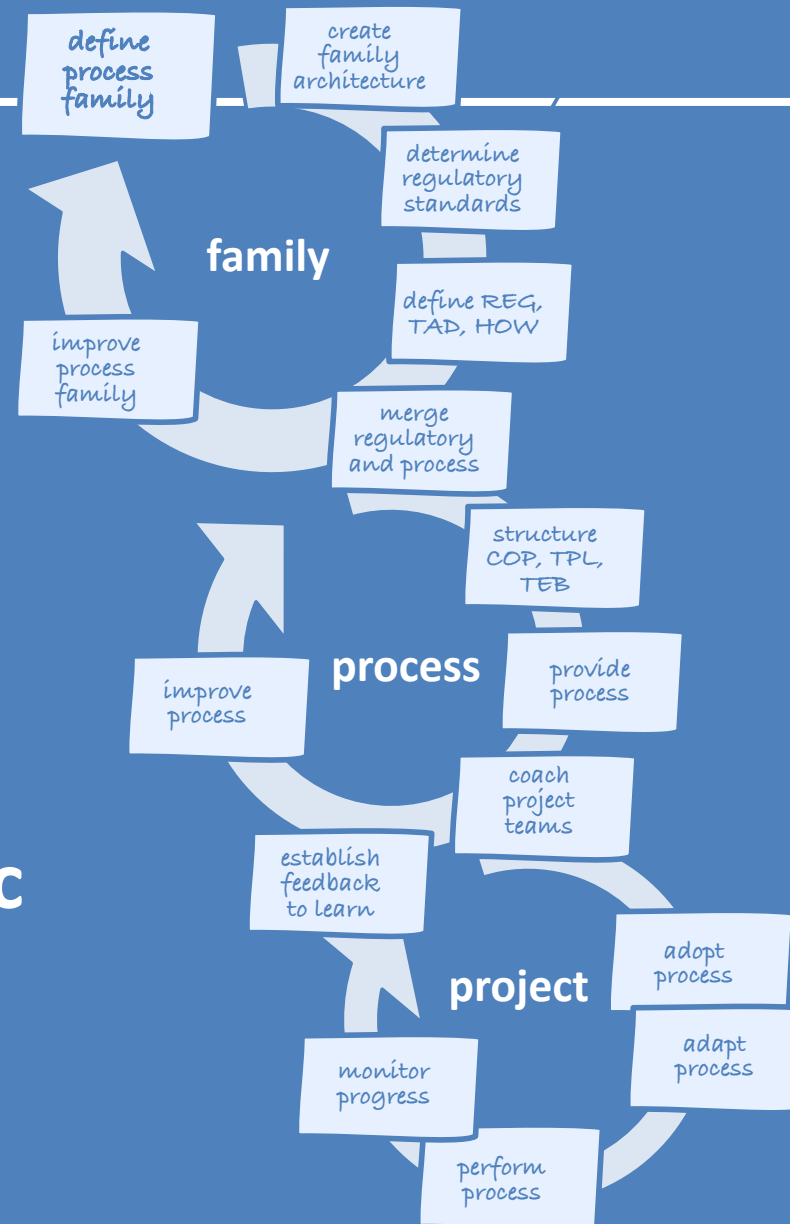
Product variants

PaR Process Family

Plan iterations
for improvements

On each level!

Learn by reuse and sync



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