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# Erfolgsfaktoren für Privacy by Design

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*Sven Türpe*, Andreas Poller

Fraunhofer-Institut für Sichere Informationstechnologie SIT  
Darmstadt



# Privacy by Design

## Ziele

Intervenierbarkeit,  
Nichtverkettbarkeit,  
Vertraulichkeit,  
Anonymität,  
Transparenz, ...

## Mechanismen, Strategien

Anonymisierung,  
Pseudonymisierung,  
Differential Privacy,  
Datenminimierung,  
Verschlüsselung, ...

## Prinzipien

Proactive,  
Preventative,  
Privacy by Default,  
Embedded into design,  
Full functionality,  
End-to-end security,  
Visibility, Transparency,  
User-centric

## Beispiele

eGK, nPA

# Privacy by Design

The diagram features the title 'Privacy by Design' at the top center. 'Privacy' is in a grey box and 'Design' is in a blue box. Two curved arrows point downwards from the title: a grey one on the left and a blue one on the right. Below the title, three columns of text are arranged. The first column on the left lists 'Ziele' and 'Mechanismen, Strategien'. The middle column lists 'Prinzipien' and 'Beispiele'. A grey arrow points from the middle column to a large blue square on the right containing a black question mark.

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## Beispiele

eGK, nPA

?

Softwarebürokratie

Big Design Up Front

Prozessmodelle

Management-  
Systeme

oder:

Schulung

Einführung der Gesundheitskarte

## Übergreifendes Sicherheits- konzept der Telemati- kinfrastruktur

Seite 1 von 802  
Stand: 10.03.2008

“Design is what designers do.” Clive Dilnot

Kreative Tätigkeit

Gestaltung von Artefakten



Philippe Starck: Juicy Salif

Foto: Niklas Morberg CC-BY-SA 2.0,  
[https://en.wikipedia.org/wiki/File:Juicy\\_Salif\\_-\\_78365.jpg](https://en.wikipedia.org/wiki/File:Juicy_Salif_-_78365.jpg)

# “Design is what designers do.” Clive Dilnot

Kreative Tätigkeit

Gestaltung von Artefakten

In verschiedenen Dimensionen



Philippe Starck: Juicy Salif

Foto: Niklas Morberg CC-BY-SA 2.0,  
[https://en.wikipedia.org/wiki/File:Juicy\\_Salif\\_-\\_78365.jpg](https://en.wikipedia.org/wiki/File:Juicy_Salif_-_78365.jpg)

“Design is about making decisions, often in the face of uncertainty. It's like running a race where the course keeps splitting. Each fork is a decision.

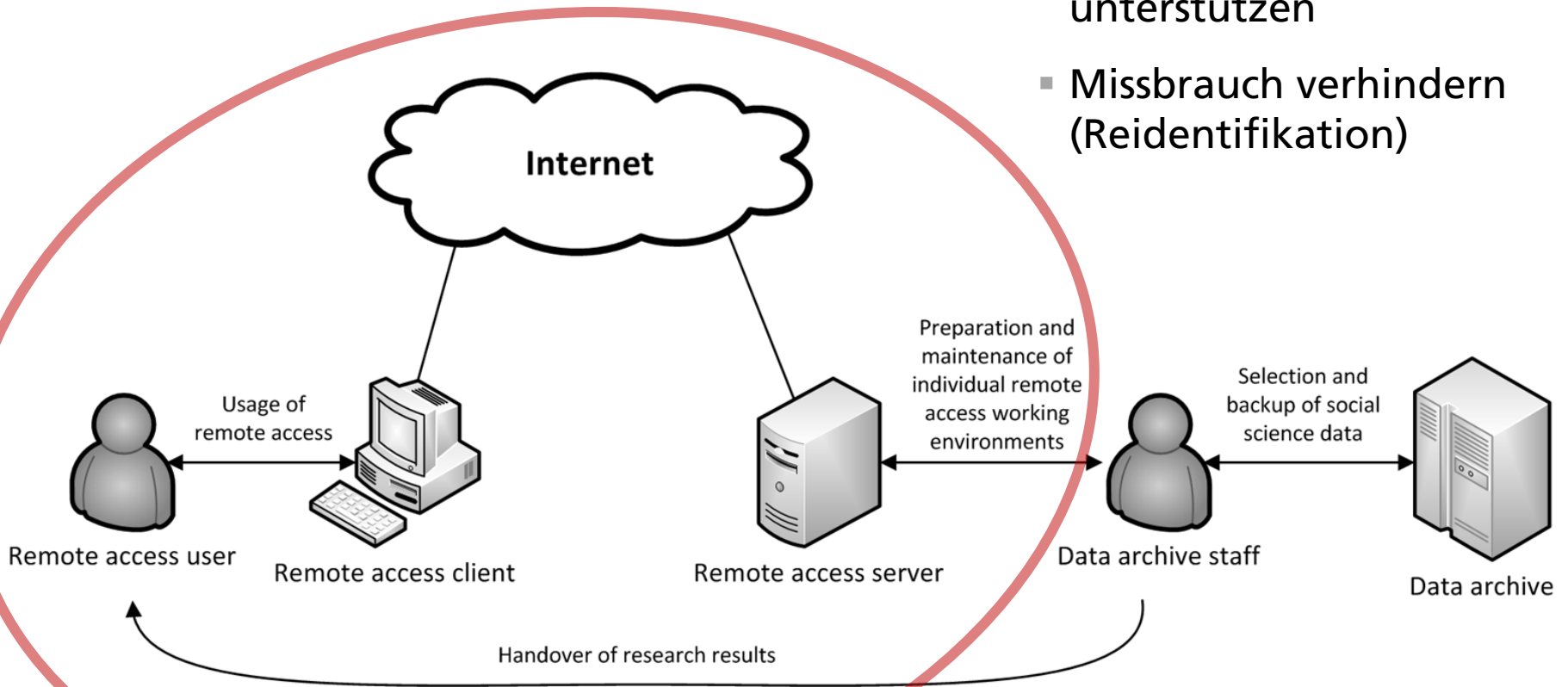
Joseph Zinter

## Privacy by Design: Prozessintervention



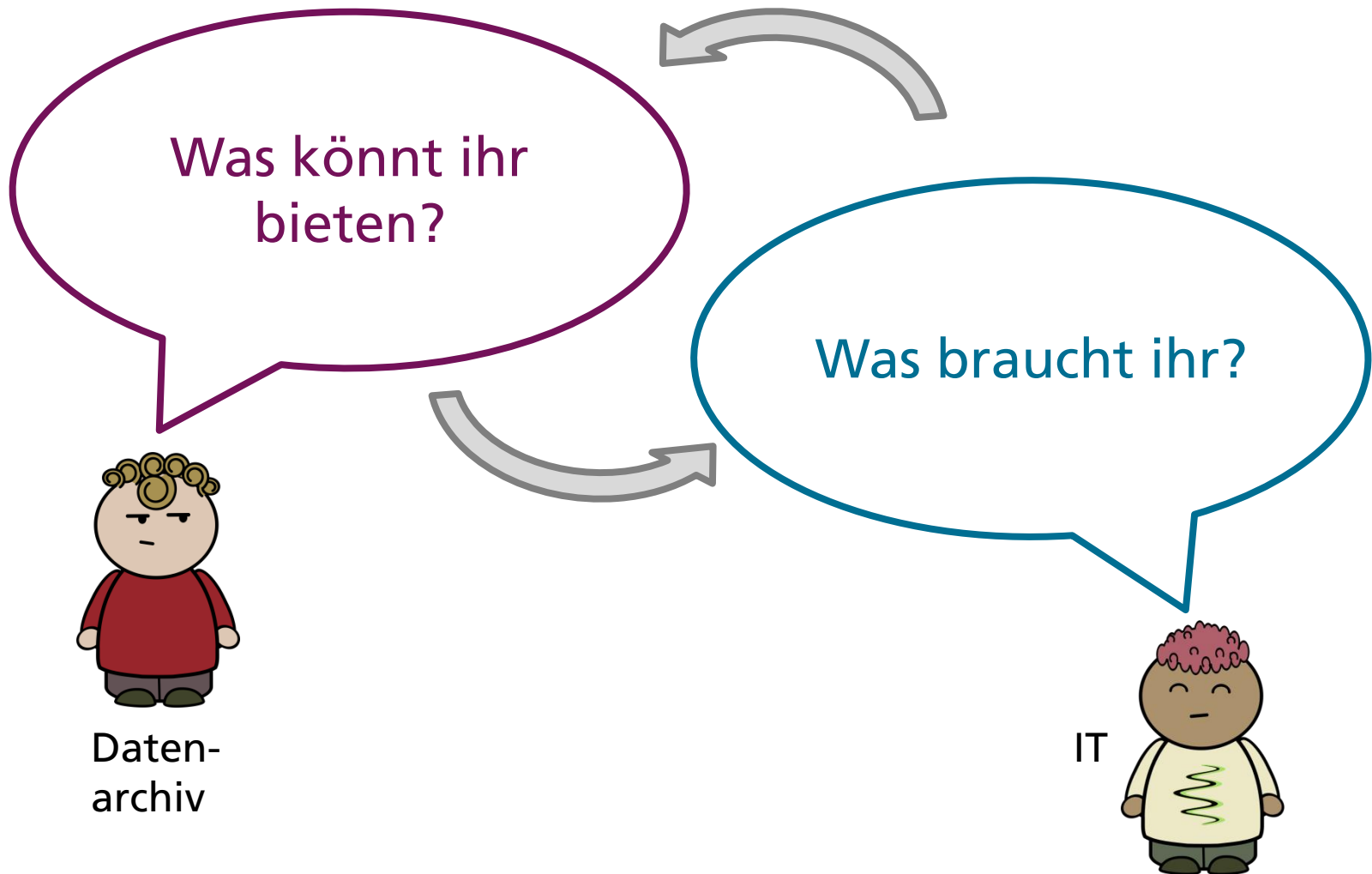
# Projekt: Fernzugriff auf ein Datenarchiv

- Legitime Auswertungen unterstützen
- Missbrauch verhindern (Reidentifikation)

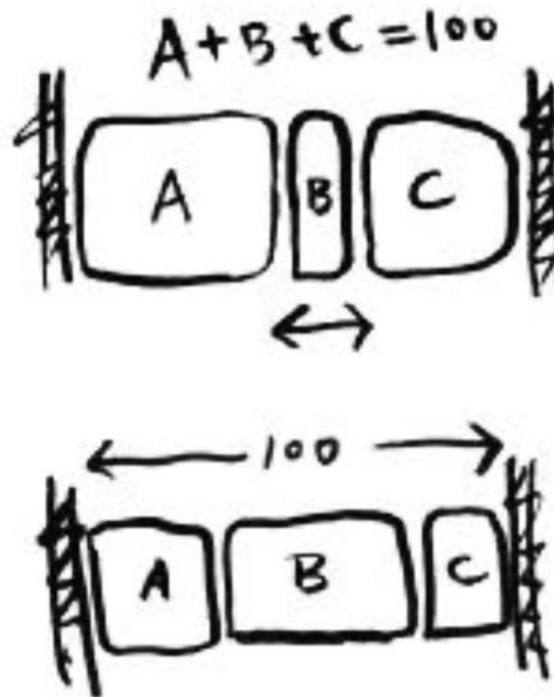




# Entwurfsentscheidungen?



# “Design is to redesign.” Jan Michl

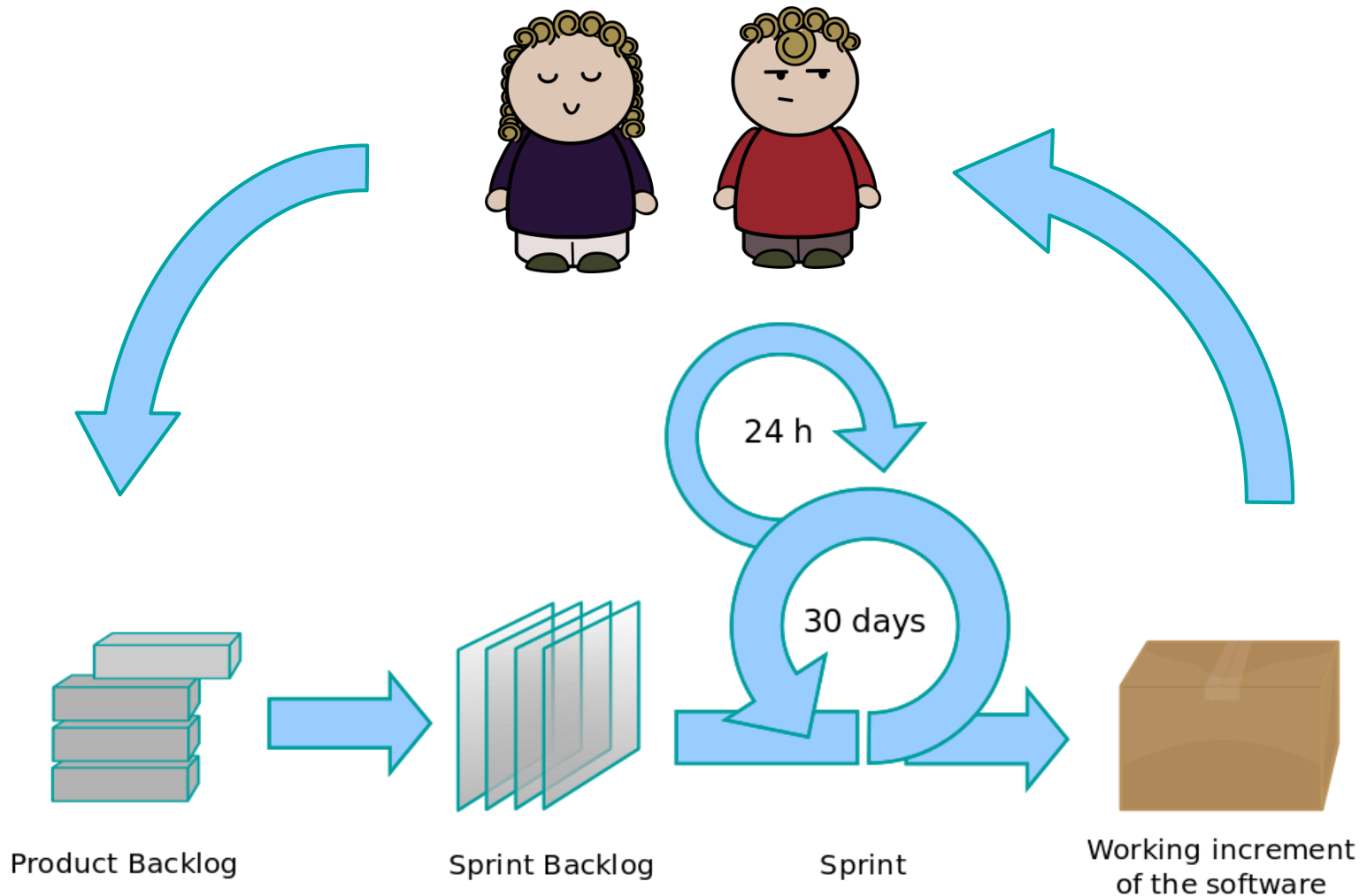


Versuch

Bewertung

Revision

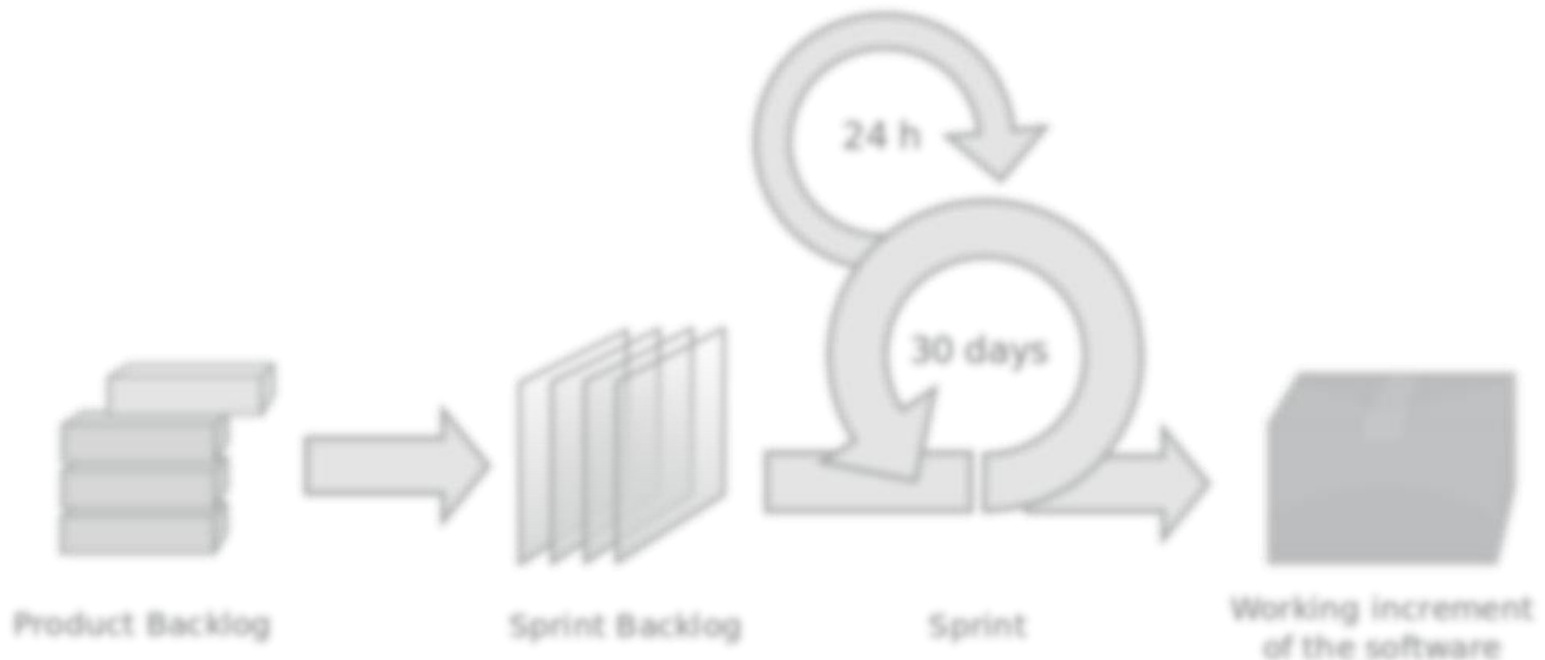
# Agile Entwicklung: Scrum



# Agile Entwicklung

## Prinzipien

- Kontinuierliche Lieferung nützlicher Software
- Empirische Prozesssteuerung
- Keine Softwarebürokratie, kein Mikromanagement
- Selbstorganisierende Teams



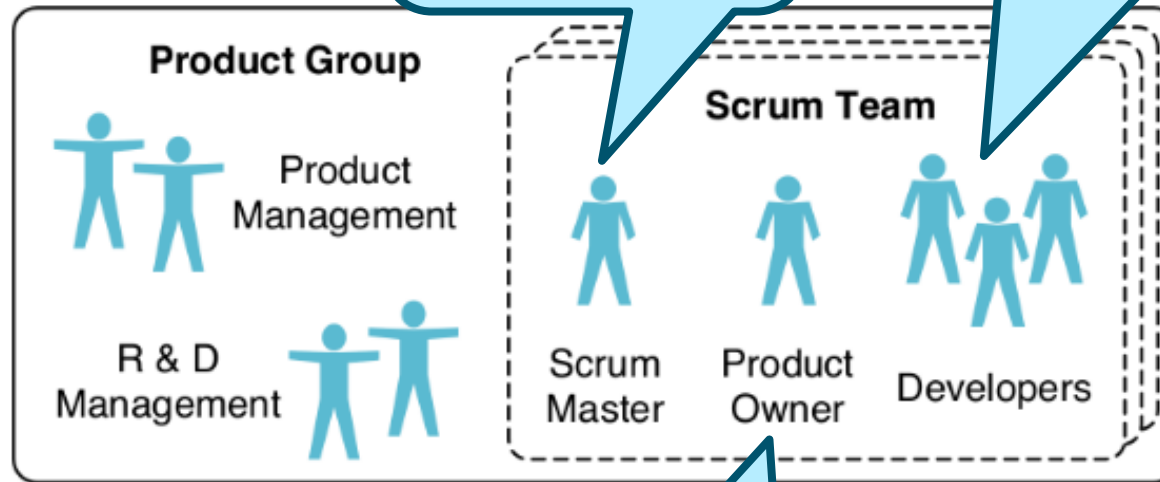
# Scrum: Rollen

Scrum Master:

- Organisiert
- Moderiert
- Unterstützt

Development Team:

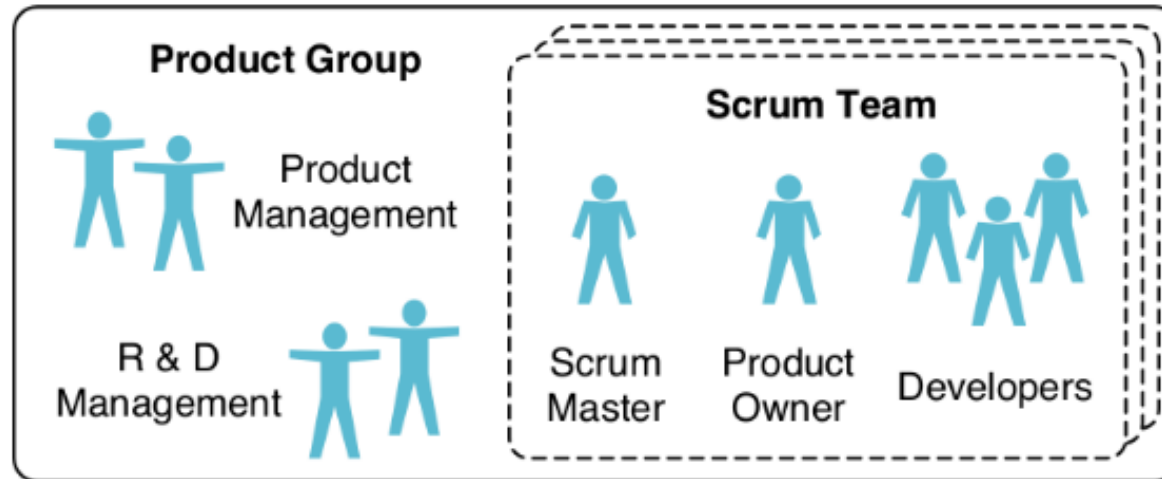
- Selbstorganisierend
- Crossfunktional



Product Owner:

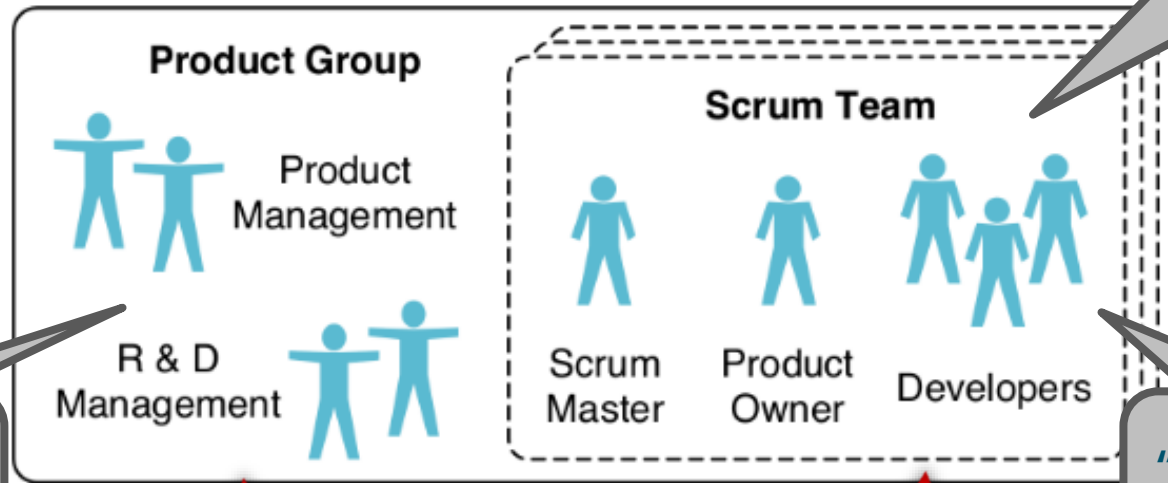
- Priorisiert Anforderungen
- Vertritt Stakeholder





- ca. 40 Entwickler in 5 Scrum-Teams
- Intervention: Pentest + Schulung
- Langzeiteffekte?

# Rollen und Sichten



“Sicherheit ist Qualität”

“Security nicht gefordert”



Features verkaufen Produkt

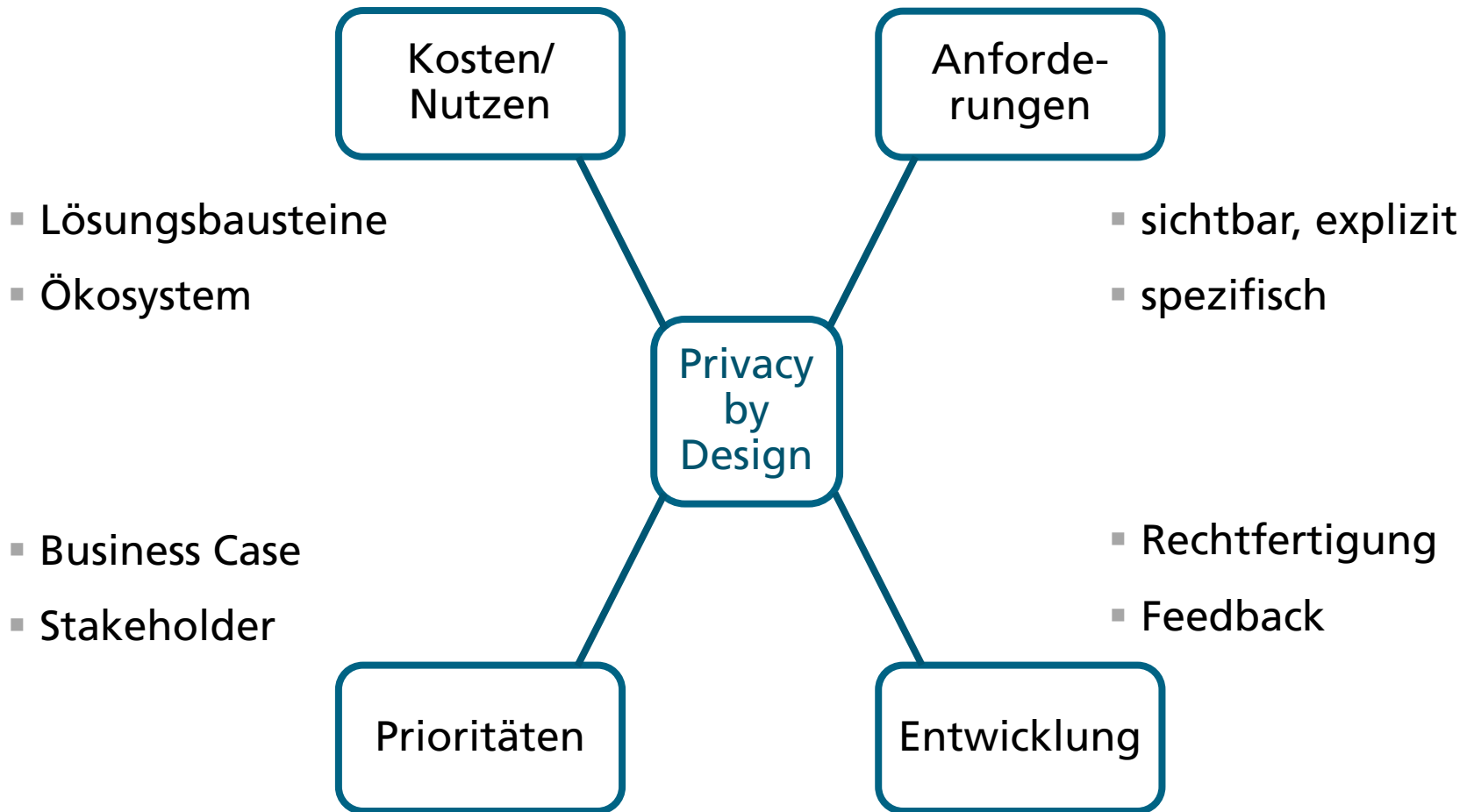


- Management bestimmt Richtung
- Entwickler liefern selbstorganisiert



Unsichtbares Merkmal

# Fazit





WERBUNG

CAST-Workshop:  
„**Sichere Software entwickeln**“  
22. März 2018

<http://www.cast-forum.de/workshops/infos/244>

<https://testlab.sit.fraunhofer.de>

[Sven.Tuerpe@sit.fraunhofer.de](mailto:Sven.Tuerpe@sit.fraunhofer.de)

<https://plus.google.com/+SvenTürpe>

<https://erichsieht.wordpress.com/>



# Veröffentlichungen

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“Can Security Become a Routine? A Study of Organizational Change in an Agile Software Development Group.” (CSCW 2017)

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