

Technical Software Product Management

Prof. Dr. Dirk Riehle

Friedrich-Alexander University Erlangen-Nürnberg

PROD C03

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Technical Product Management (Recap)

- Key processes
 - Detailed product planning
 - Detailed release planning
 - Feature validation
- Example practices
 - Feature specification
 - Feature prioritization
 - PRD maintenance

Key artifacts

- Product Requirements Document (PRD)

Strategic

STRATEGY

		Business Plan
Market Problems	Market Definition	Pricing
Win/Loss Analysis	Distribution Strategy	Buy, Build or Partner
Distinctive Competencies	Product Portfolio	Product Profitability
MARKET	FOCUS	BUSINESS
Competitive Landscape	Product Roadmap	Innovation
Asset Assessment		



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Positioning

Marketing Plan

Buying Process

Customer Acquisition

Buyer Personas

Customer Retention

User Personas

Program Effectiveness

PLANNING

PROGRAMS

READINESS

SUPPORT

Requirements

Launch Plan

Sales Process

Presentations & Demos

Use Scenarios

Thought Leadership

Collateral

"Special" Calls

Stakeholder Communications

Lead Generation

Sales Tools

Event Support

Referrals & References

Channel Training

Channel Support

Pragmatic Marketing Framework™

The market-driven model for managing and marketing technology products

Technical

EXECUTION

- **Functional Specification**
- **Technical Specification**
- **Whole Product Package**

Functional Specification (PRD 1 / 3)

- Types of requirements
- Structure of document
- Individual requirements
 - Feature definition
 - Feature prioritization
 - User experience design



How the customer explained it



How the Project Leader understood it



How the Analyst designed it



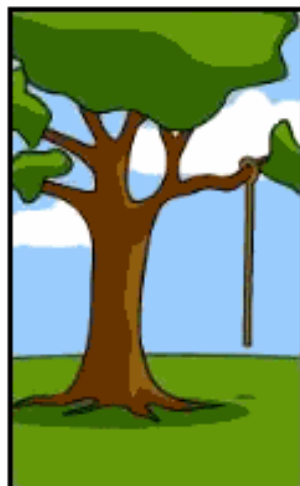
How the Programmer wrote it



How the Business Consultant described it



How the project was documented



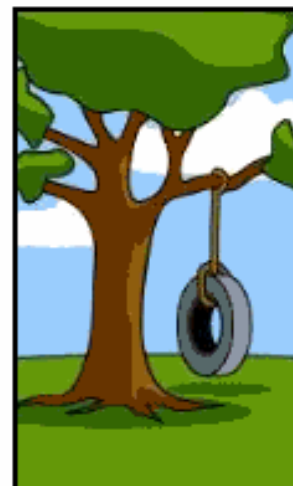
What operations installed



How the customer was billed



How it was supported

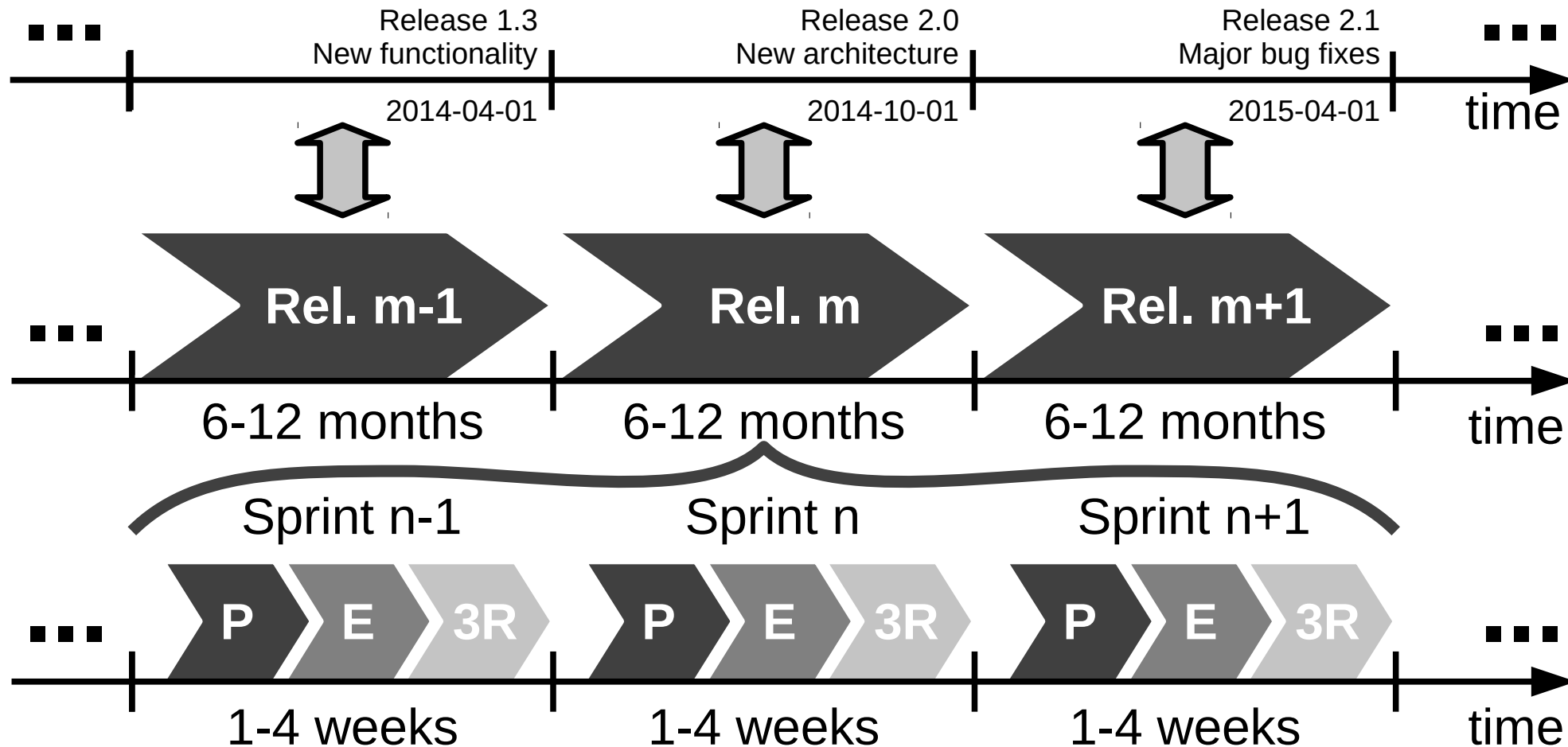


What the customer really needed

Cartoon Lessons

- Understanding project requirements is hard
 - **Understanding market requirements is even harder!**
- Innovative products cannot be predicted easily
 - Certainly customers don't always know what they want
- Product management orchestrates many stakeholders

Agile / Scrum Product Planning



Release Plan

- Functional specification of a release
 - Consists of all features considered part of that release
- Agile / Scrum release plan
 - Structures the release into sprints by theme and purpose
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Agile / Scrum Product Backlog (Functional Specification)

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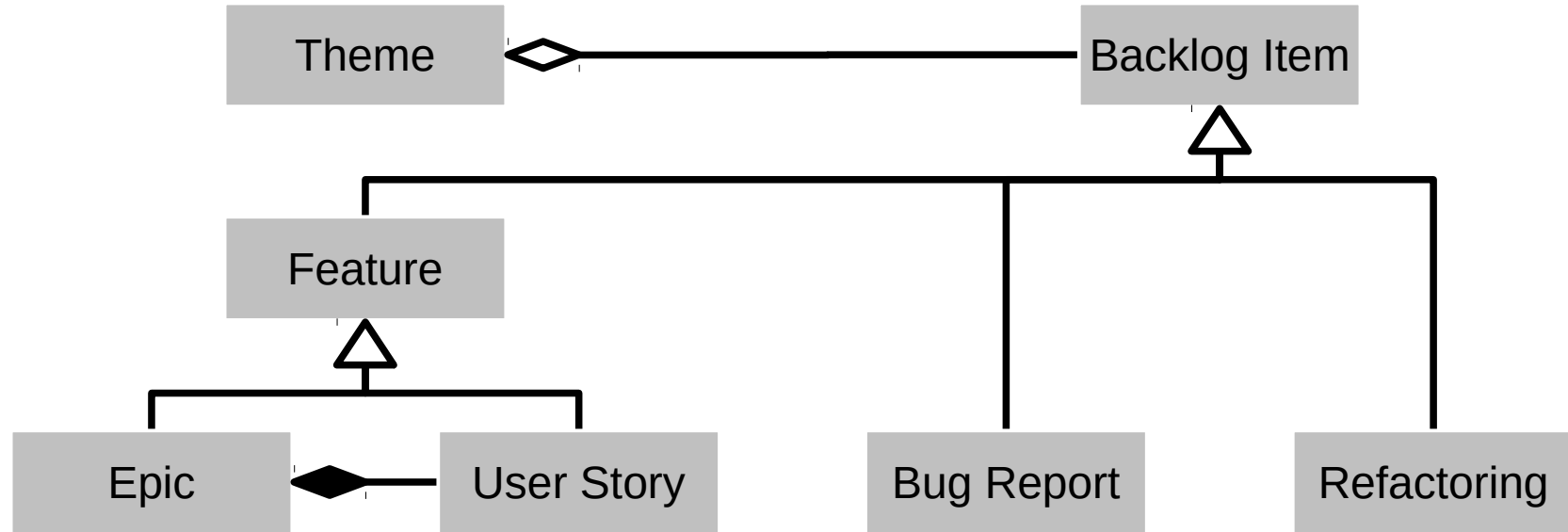
Connecting Product Vision with Backlog Through Glossary



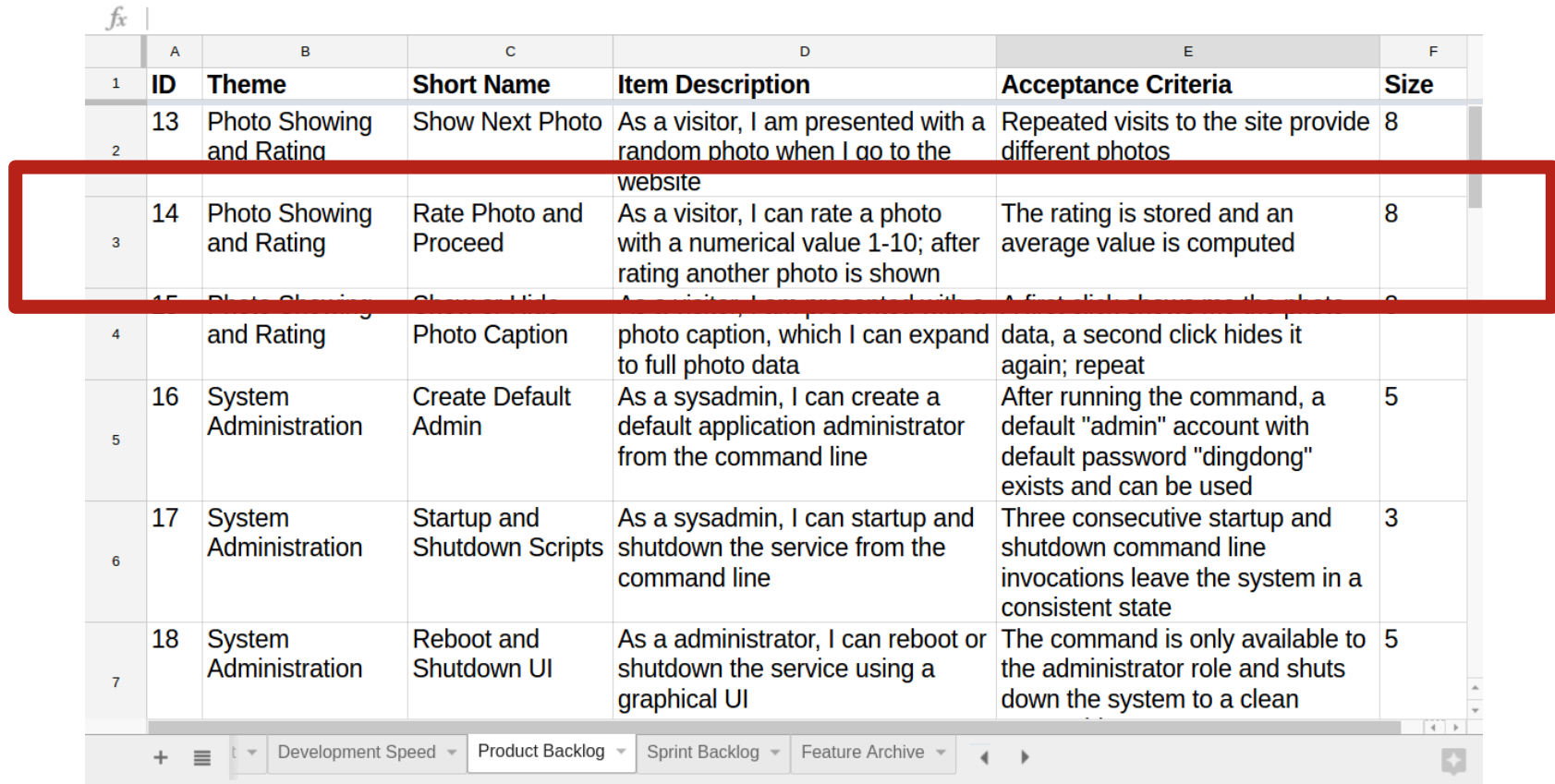
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Development Speed Product Backlog Sprint Backlog Feature Archive

Flowers / Tell-a-Friend Implemented



[[show](#) | [tell](#)] — [[signup](#) | [login](#) | [configure](#)]

Tell a friend!

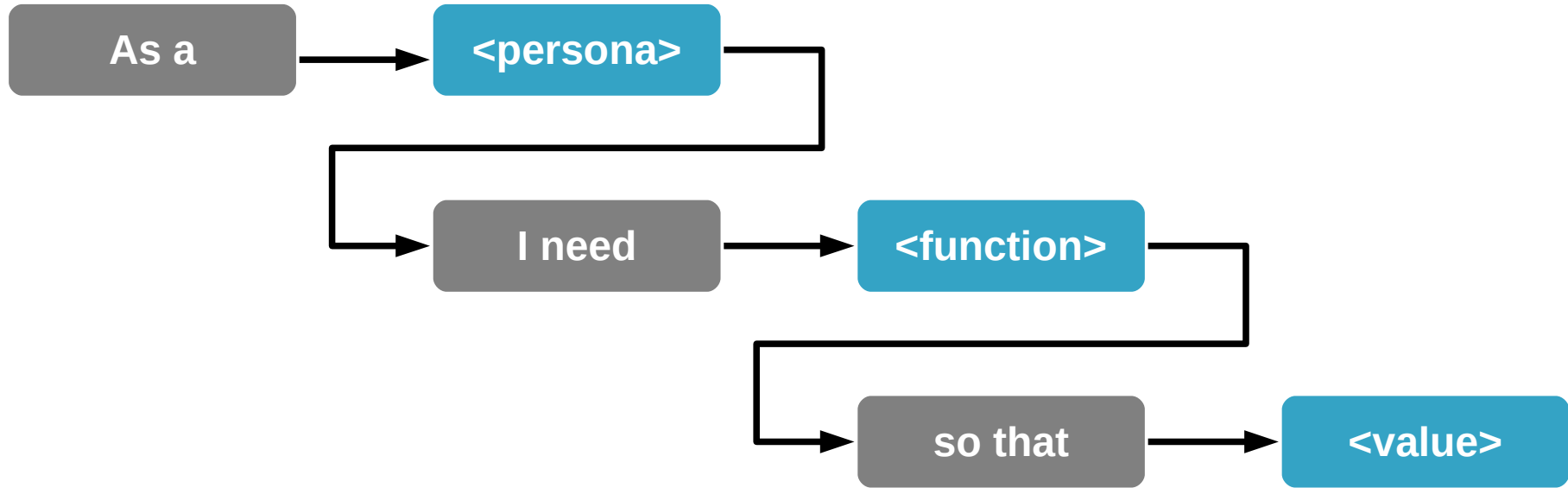
	From Email Address:	<input type="text" value="dirk@riehle.org"/>
	To Email Address:	<input type="text"/>
	Email Subject:	<input type="text"/>
	Message:	<div><div>http://localhost:8585/ http://localhost:8585/x1ac5.html</div><div>Tell!</div></div>

This website is to show the best in photos!

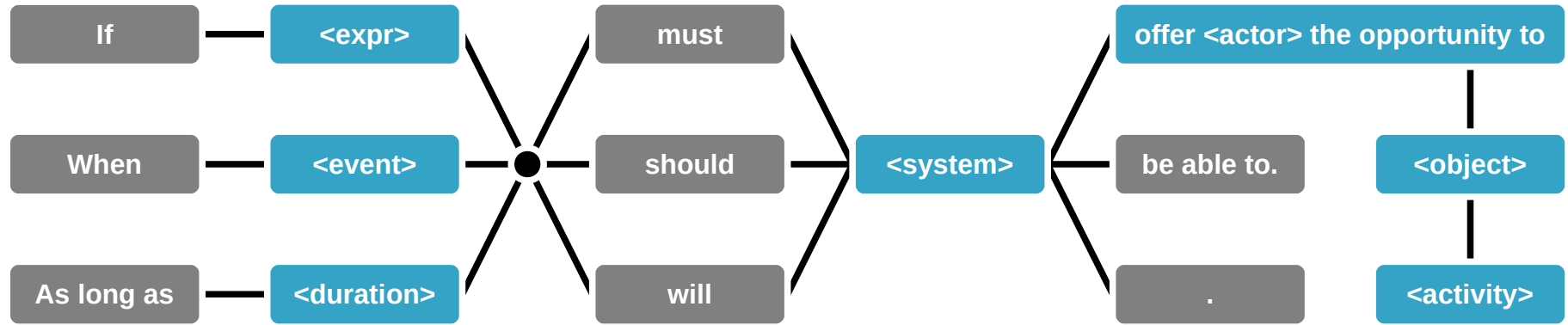
[[blog](#)] — [[about](#) | [contact](#) / [imprint](#) | [terms](#)] — [language: en | [de](#)] — [photo size: [XS](#) | [S](#) | M | [L](#) | [XL](#)] — [debug: [reset](#)]

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Agile Sentence Template (User Story)



Classic Requirements Specification Sentence Template

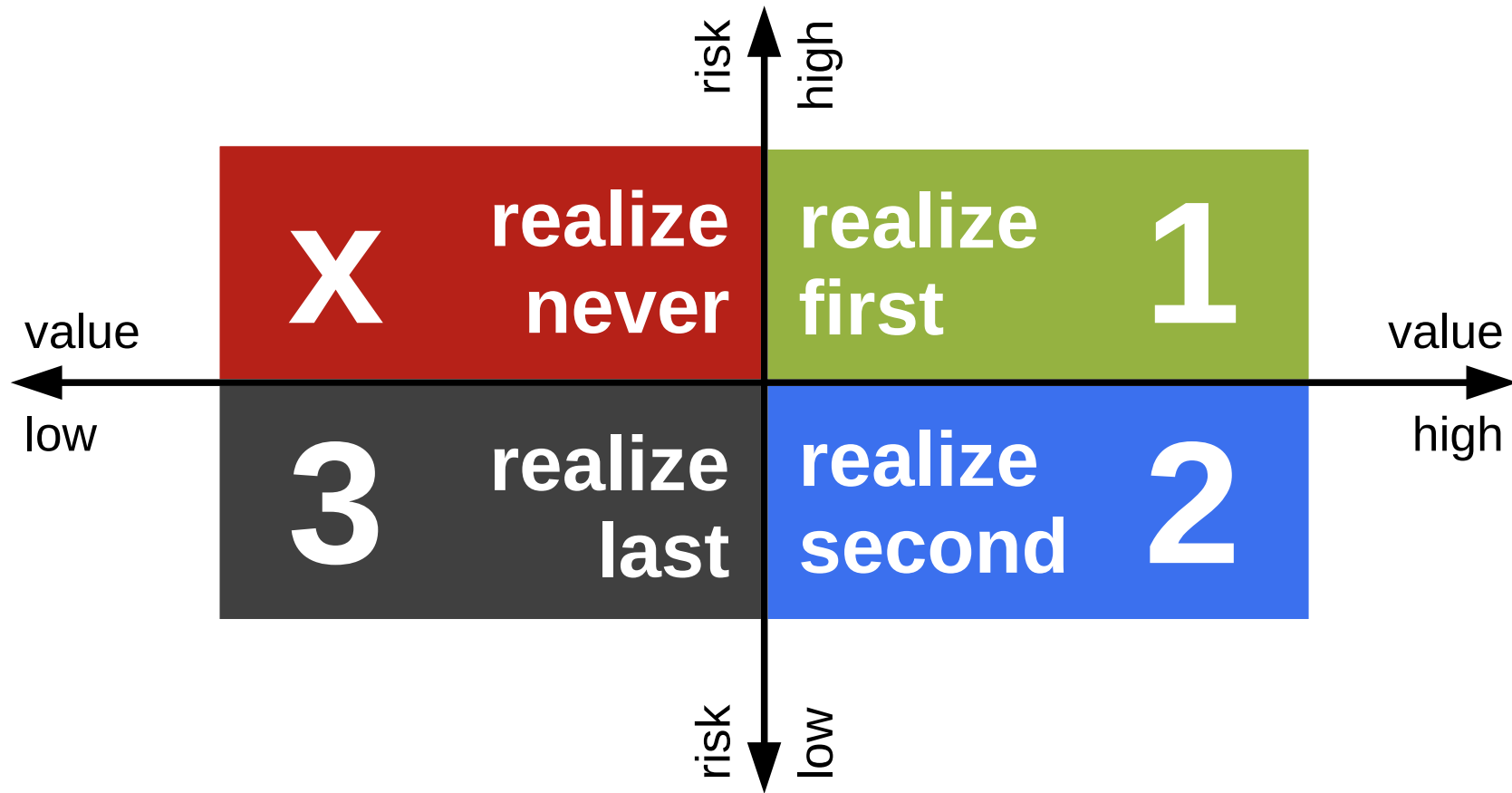


Acceptance Criterion

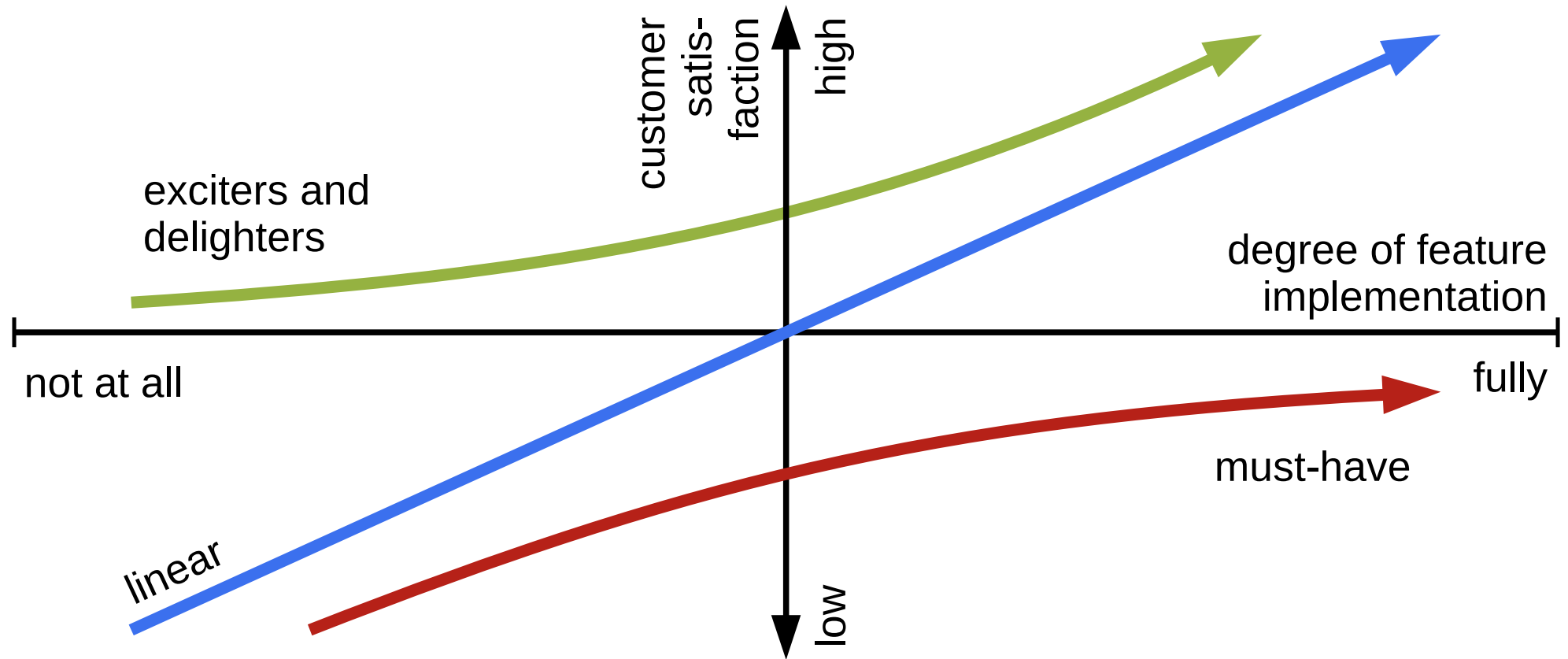
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Prioritizing Features by Value and Risk



Classifying Features by Kano Model



Technical Specification (PRD 2 / 3)

- Definition of platform, language, tools
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Definition of Done

- Definition of Done (DoD)
 - An auditable check-list of results
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3. Database upgrade in test environment succeeded
4. Software documentation passes external review
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Example DoD for Single Feature

1. Unit tests for feature have been written and are passing
2. Code review has been completed
3. Feature branch has been tagged and merged
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5. Feature was demoed and accepted by product owner

Definition of Done vs. Acceptance Criteria

- **DoD (Feature)**
 - Specific to a particular type of artifact
 - The same for all instances of that type
- **Acceptance Criteria**
 - Specific to a particular artifact

The Whole Package (PRD 3 / 3)

- Product package and collateral
- Ancillary services

Review / Summary of Session

- The Product Requirements Document (PRD)
 - Functional Specification
 - Technical Specification
 - Whole Product Package

Thank you! Questions?

dirk.riehle@fau.de – <http://osr.cs.fau.de>

dirk@riehle.org – <http://dirkriehle.com> – [@dirkriehle](#)

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 - Licensed under [Creative Commons Attribution 4.0 International License](#)
- Contributions
 - ...

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It is Friedrich-Alexander University Erlangen-Nürnberg – FAU, in short.
Corporate identity wants us to say “Friedrich-Alexander University”.

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- Detailed release planning
- Feature validation

- Example practices

- Feature specification
- Feature prioritization
- PRD maintenance

Key artifacts

- Product Requirements Document (PRD)

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"Special" Calls

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- **Technical Specification**
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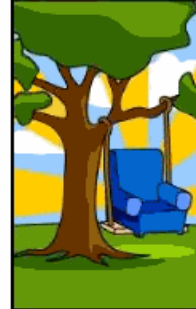
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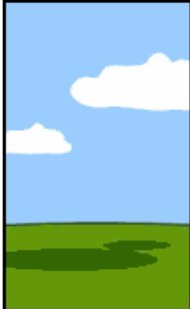
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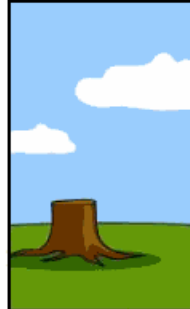
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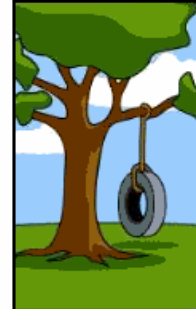
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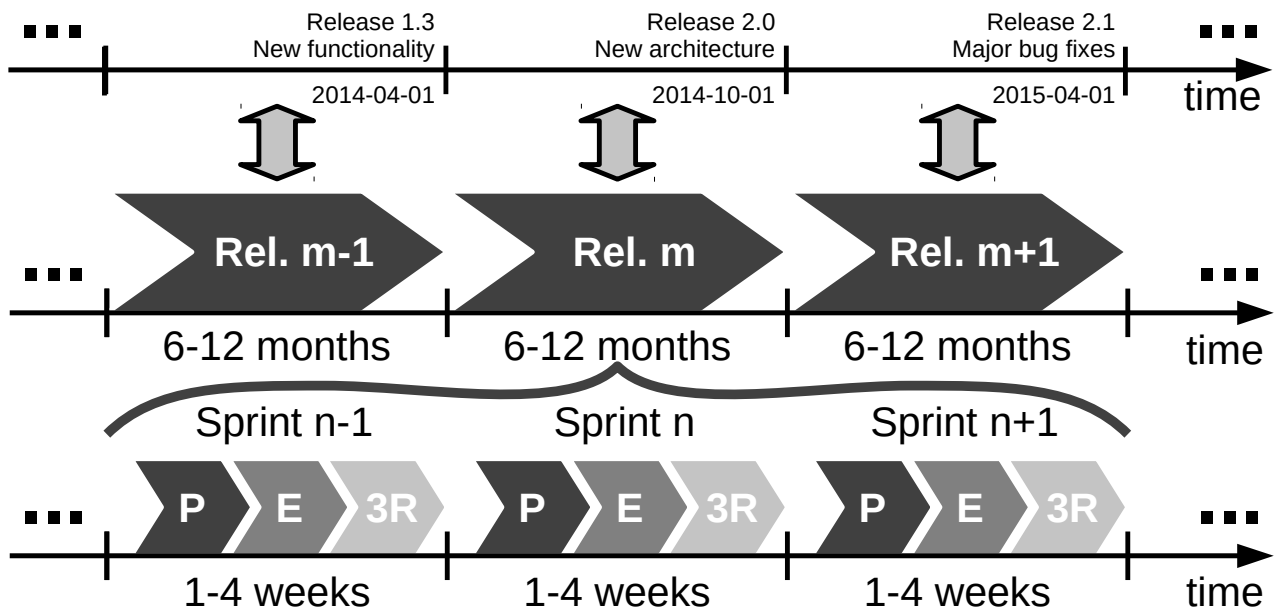


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<div> + ≡ Chart ▾ Development Speed ▾ Product Backlog ▾ Sprint Backlog ▾ Feature Archive ▾ ◀ ▶ Explore </div>						

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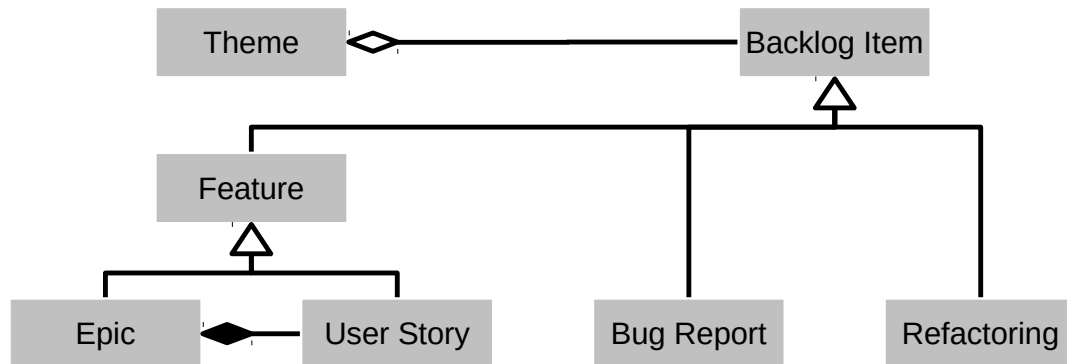
Connecting Product Vision with Backlog Through Glossary



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Wahlzeit

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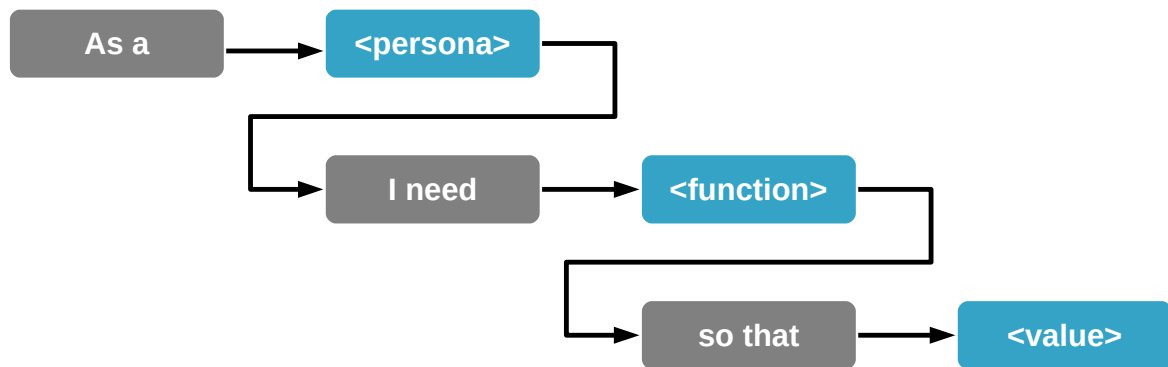
Tell a friend!

	From Email Address:	<input type="text" value="dirk@riehle.org"/>
	To Email Address:	<input type="text"/>
	Email Subject:	<input type="text"/>
	Message:	<div><div>http://localhost:8585/</div><div>http://localhost:8585/x1ac5.html</div></div>
<input type="button" value="Tell!"/>		

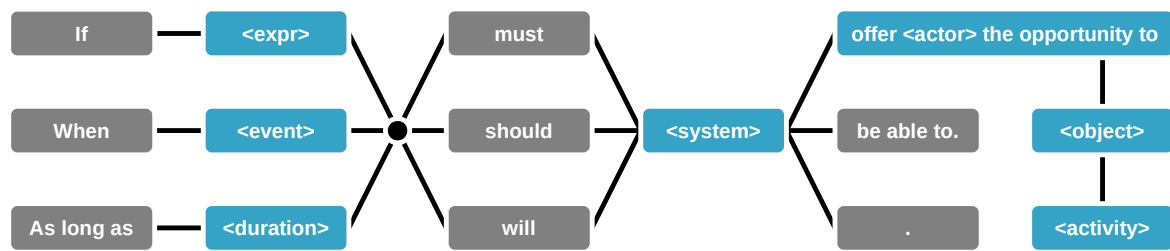
This website is to show the best in photos!

[[blog](#)] — [[about](#) | [contact](#) / [imprint](#) | [terms](#)] — [language: en | [de](#)] — [photo size: [XS](#) | [S](#) | M | [L](#) | [XL](#)] — [debug: [reset](#)]
[processing time: 0.012 seconds]

Agile Sentence Template (User Story)



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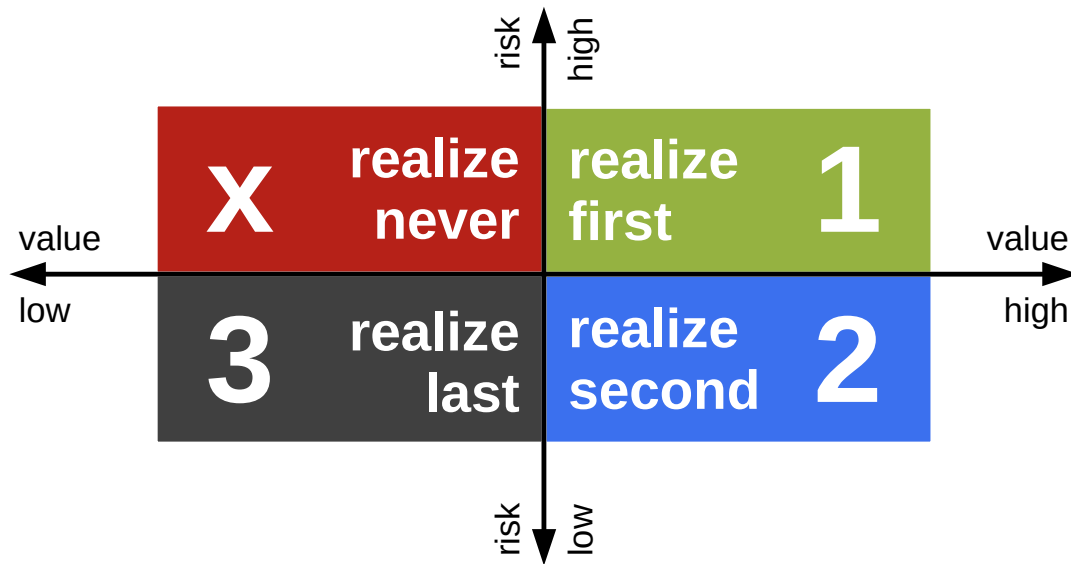


Acceptance Criterion

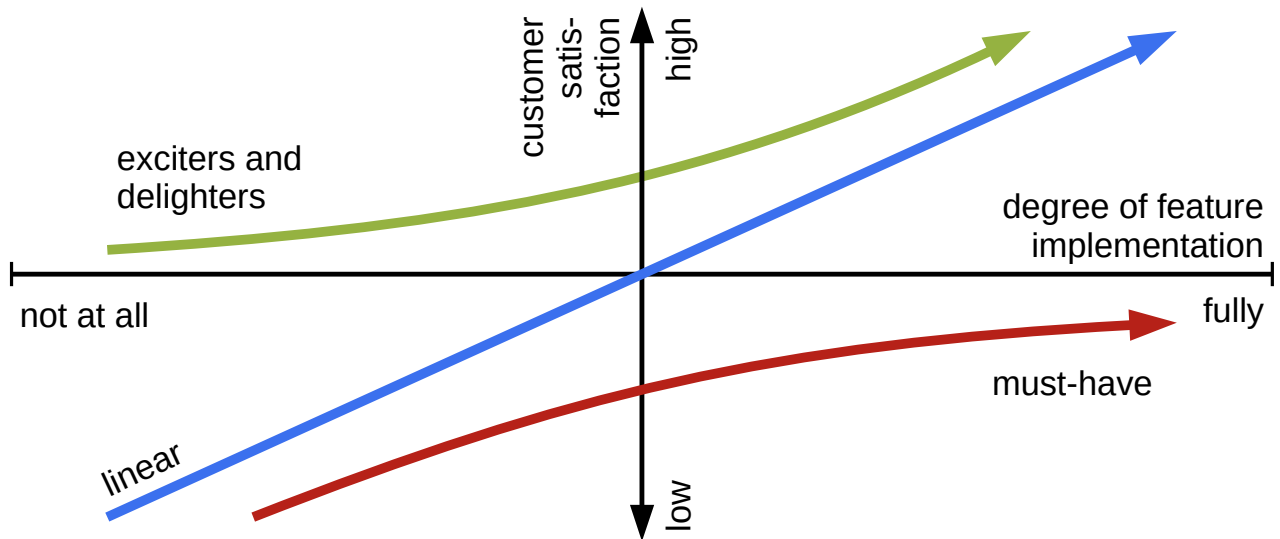
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The Whole Package (PRD 3 / 3)

- Product package and collateral
- Ancillary services

Review / Summary of Session

- The Product Requirements Document (PRD)
 - Functional Specification
 - Technical Specification
 - Whole Product Package

Thank you! Questions?

dirk.riehle@fau.de – <http://osr.cs.fau.de>

dirk@riehle.org – <http://dirkriehle.com> – [@dirkriehle](#)

DR

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