

Yes,
you really can have
agility and high maturity
at the same time

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Systematic Business Areas

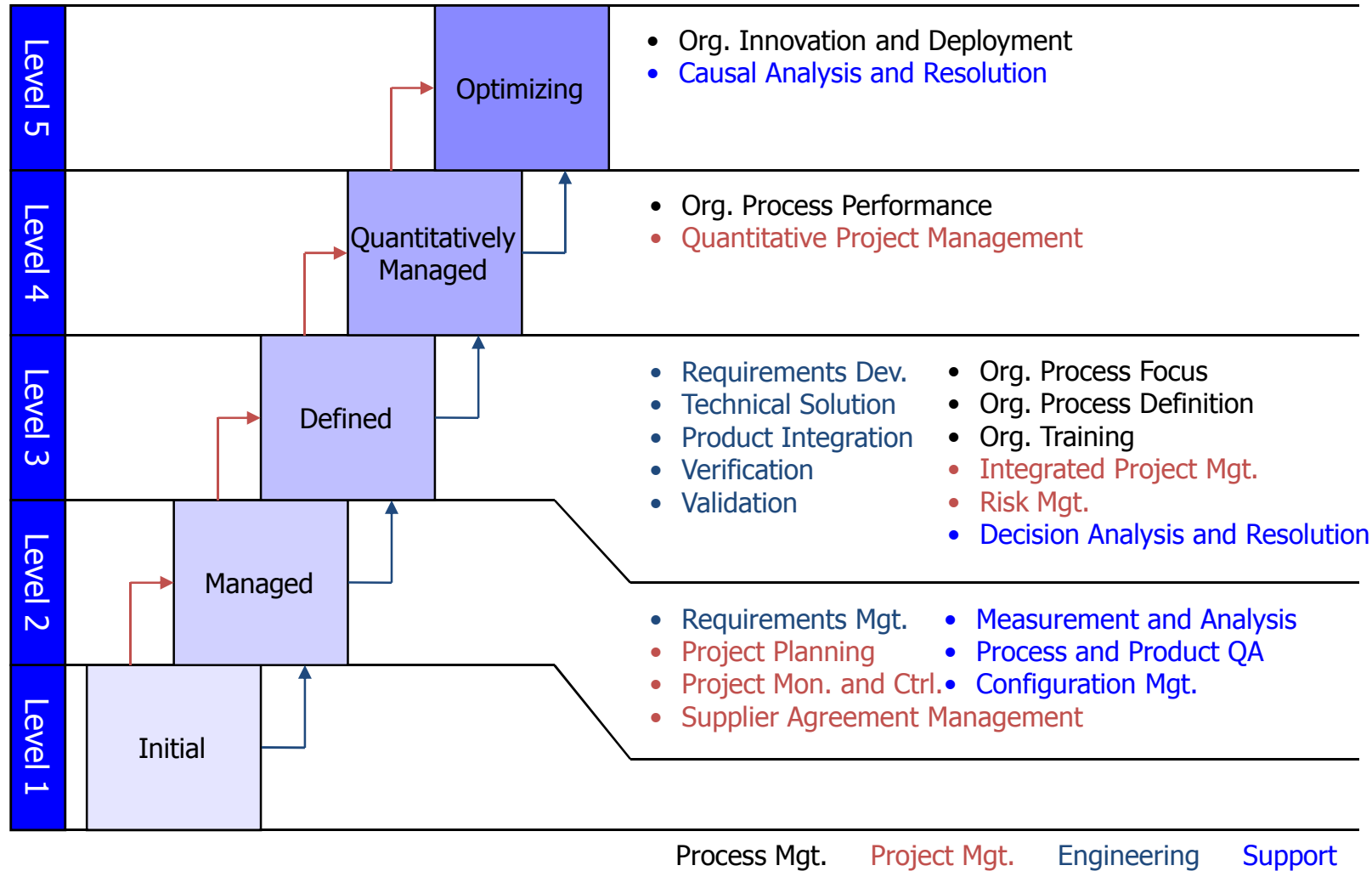


The Way We work

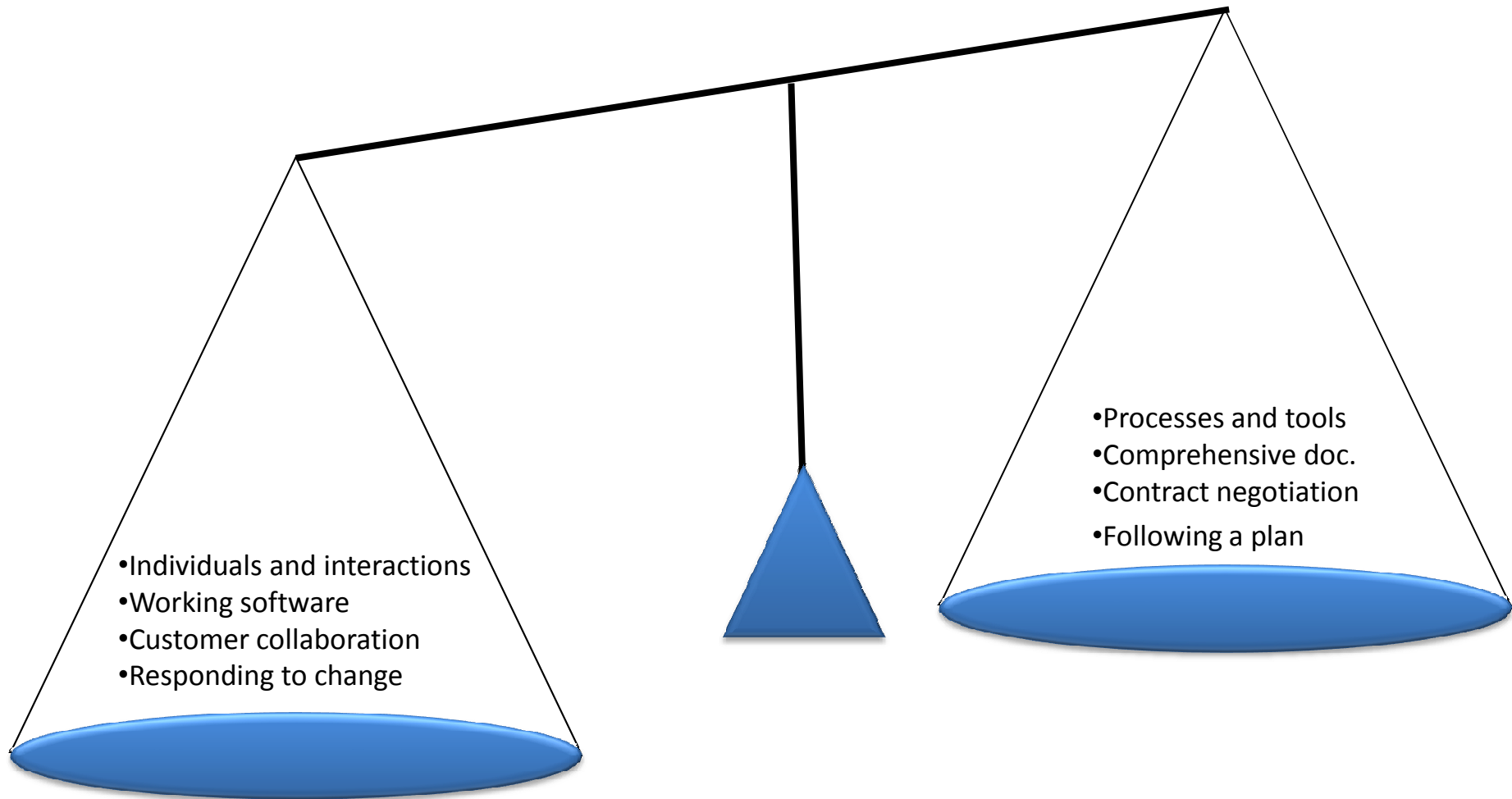


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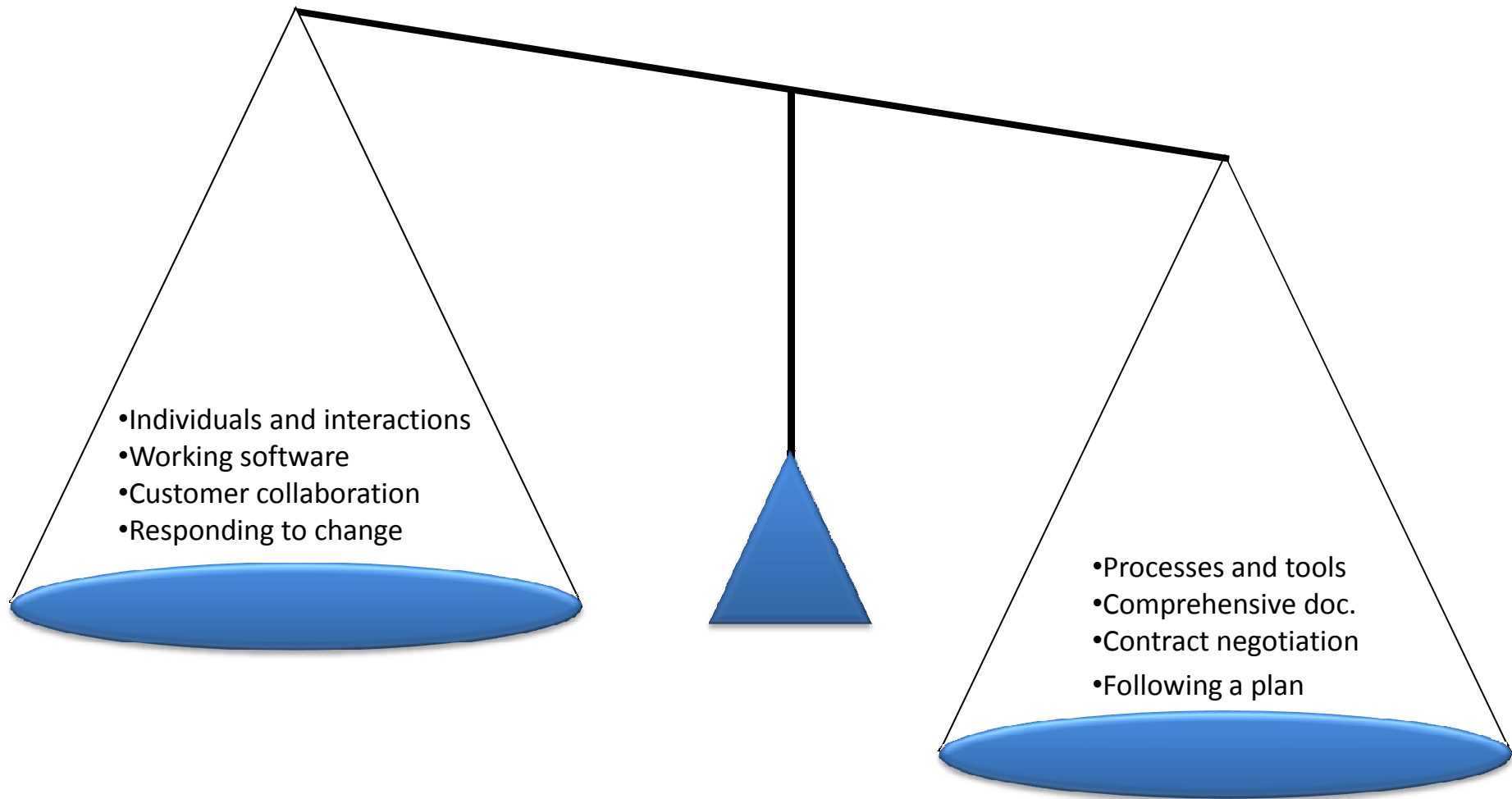
Capability Maturity Model



The Agile Point of View

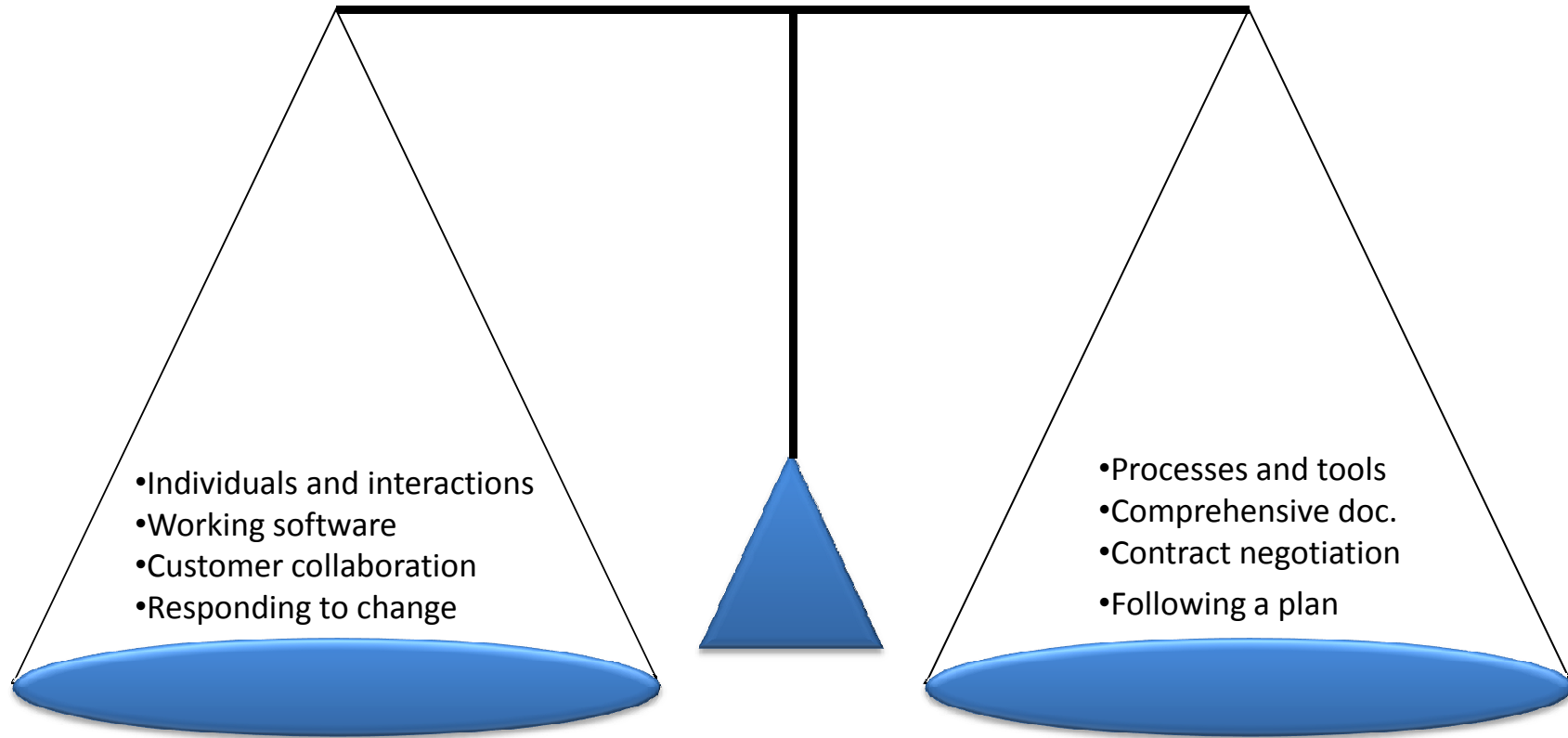


How CMMI is Perceived

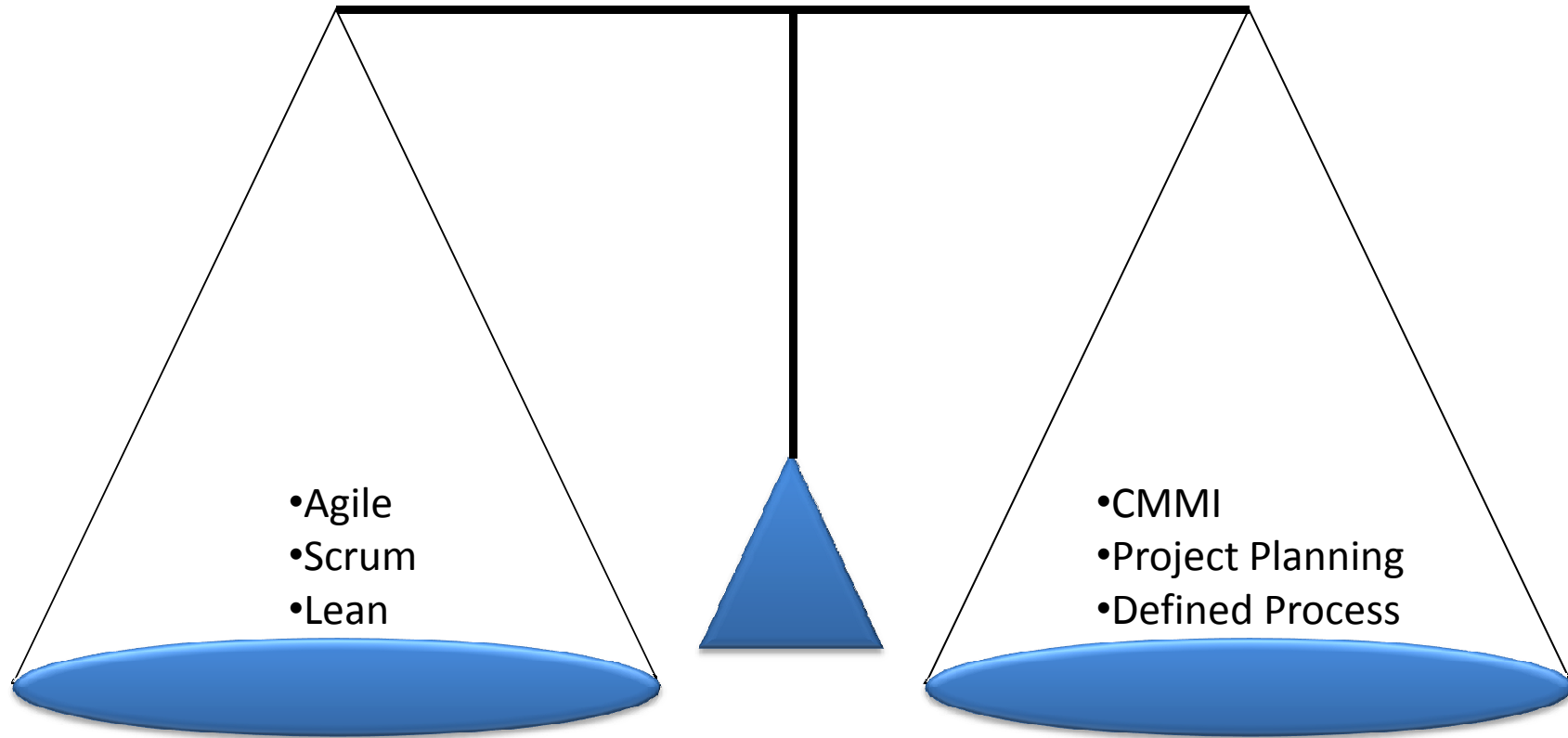


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Our Way of Working



Features and Stories



Feature

A coherent piece of functionality that makes sense to a customer, and is of value to the customer and preferably to the end user.

Example features

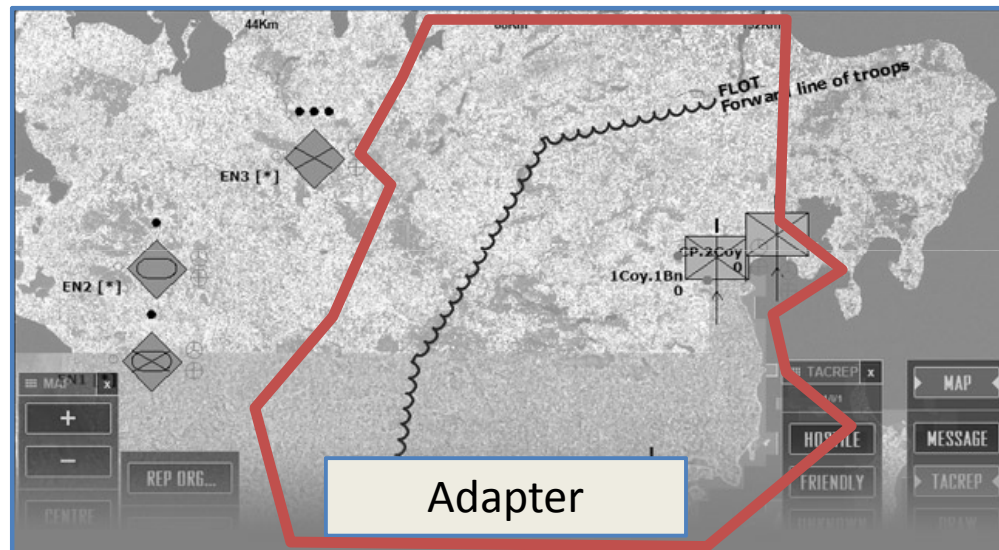
- Word: Print, Text formatting
- Counterstrike: Chat
- Command and Control System:
Tactical Communications over radio
network (TACCOMS)

Sitaware Battle Management



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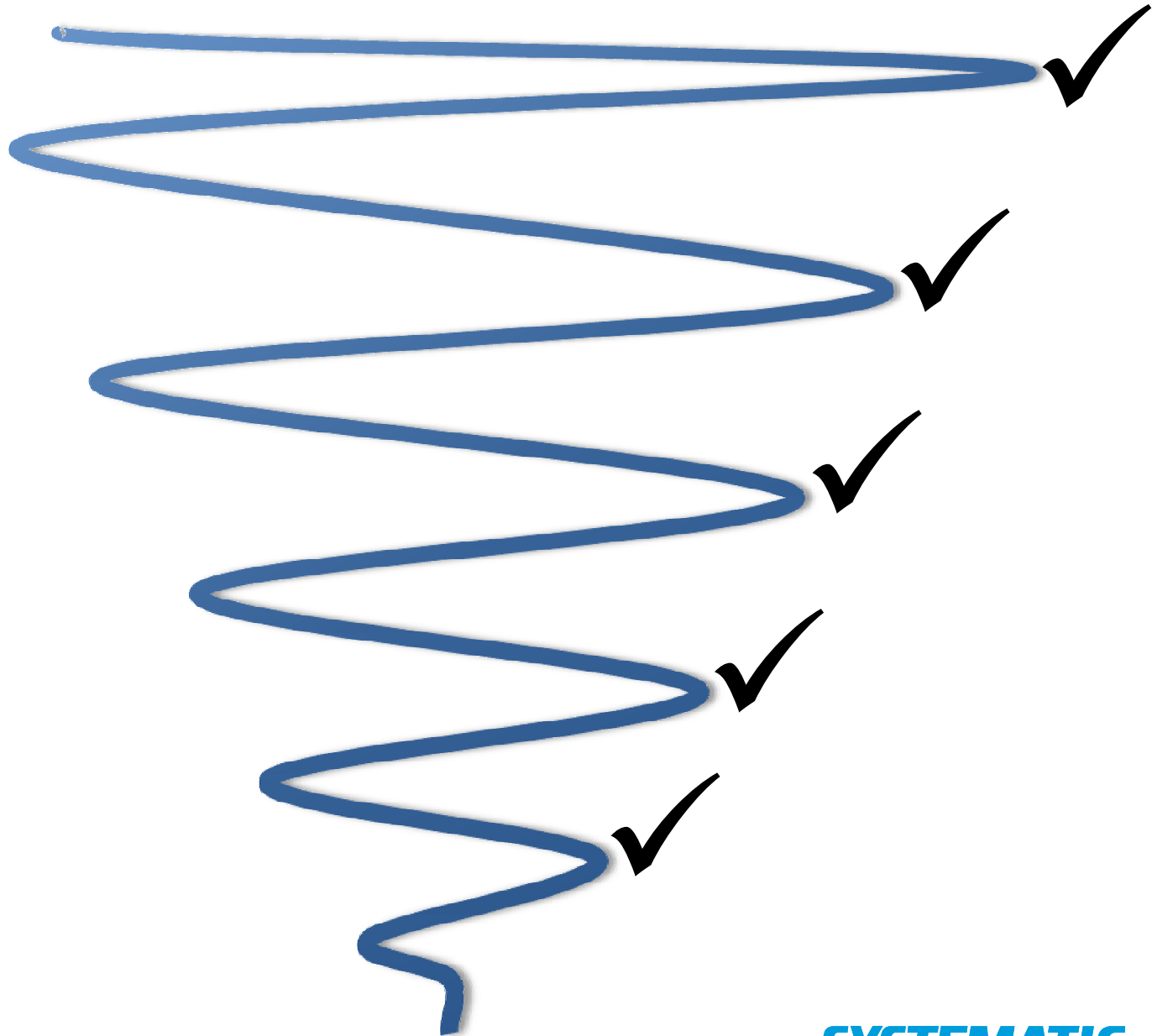
TACCOMS Architecture



Radio API

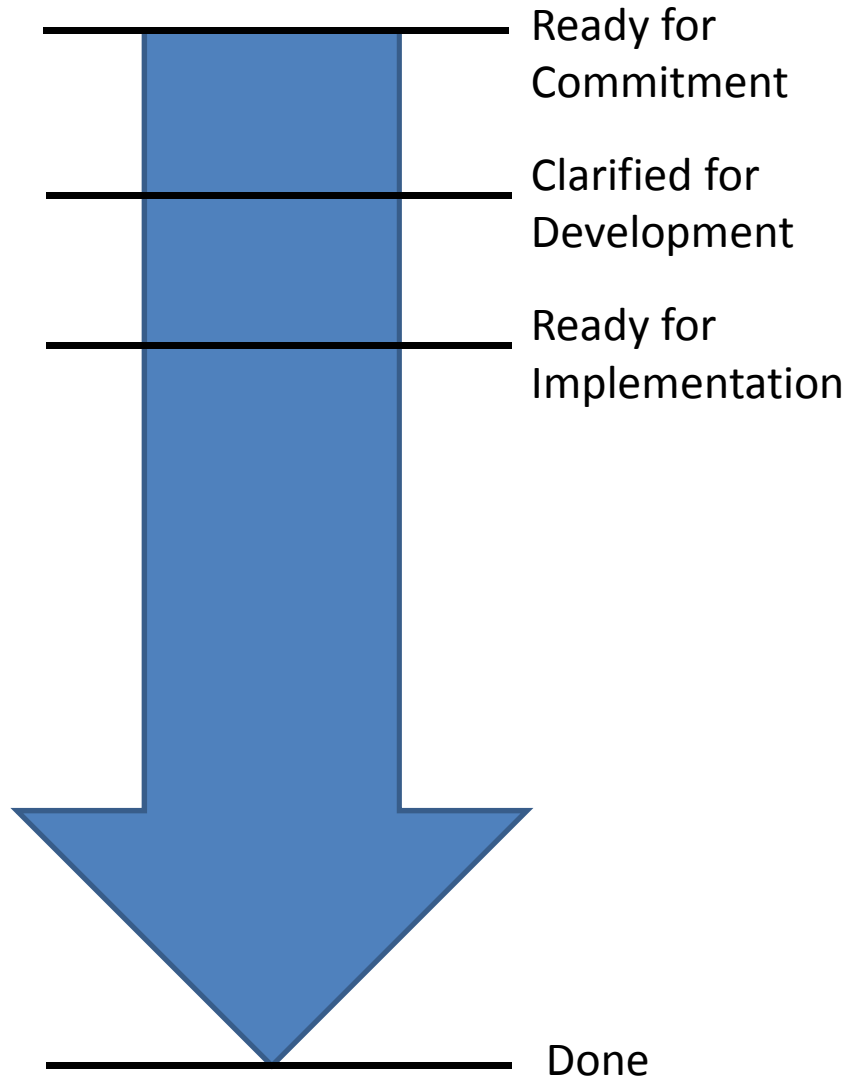


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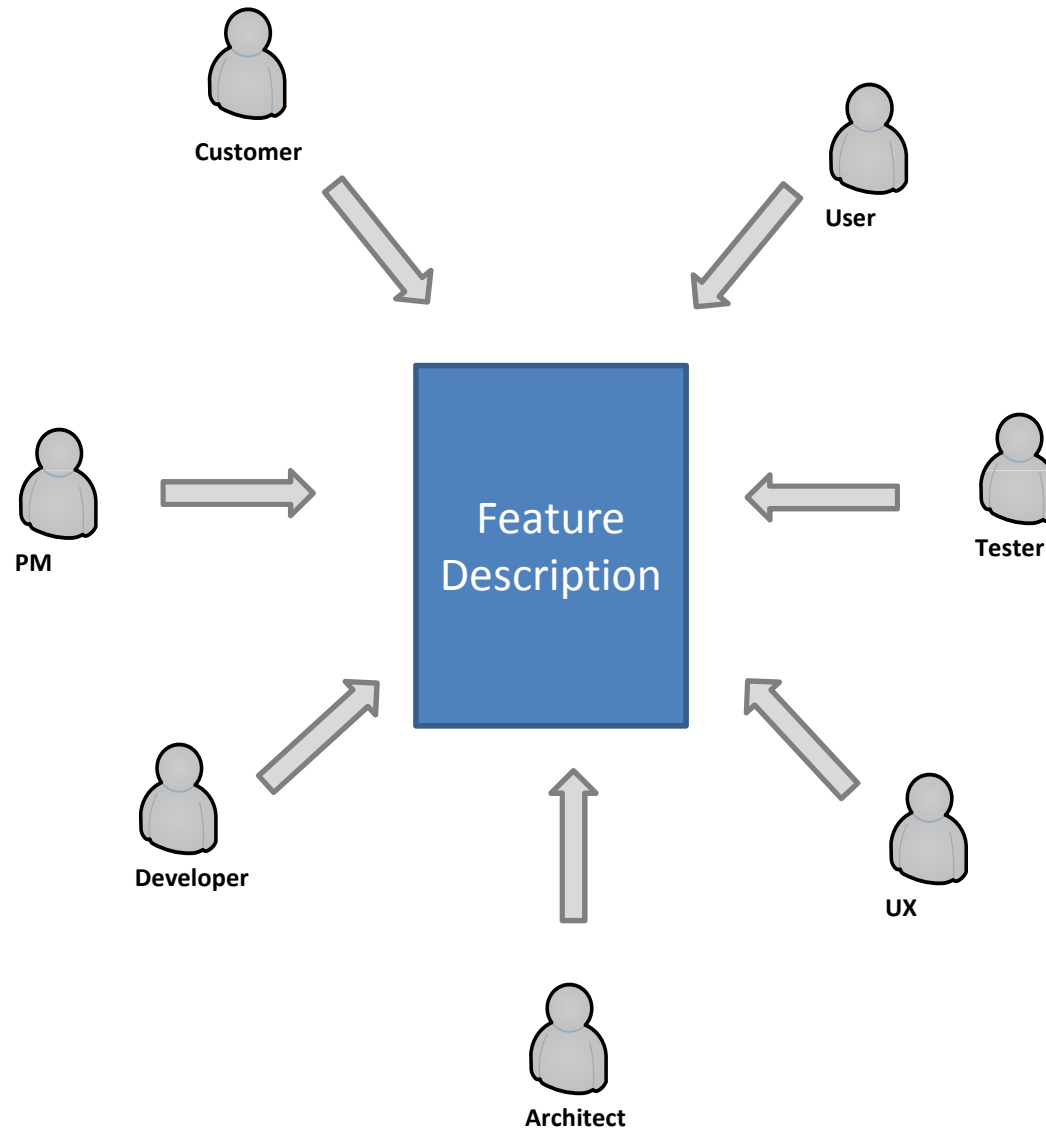


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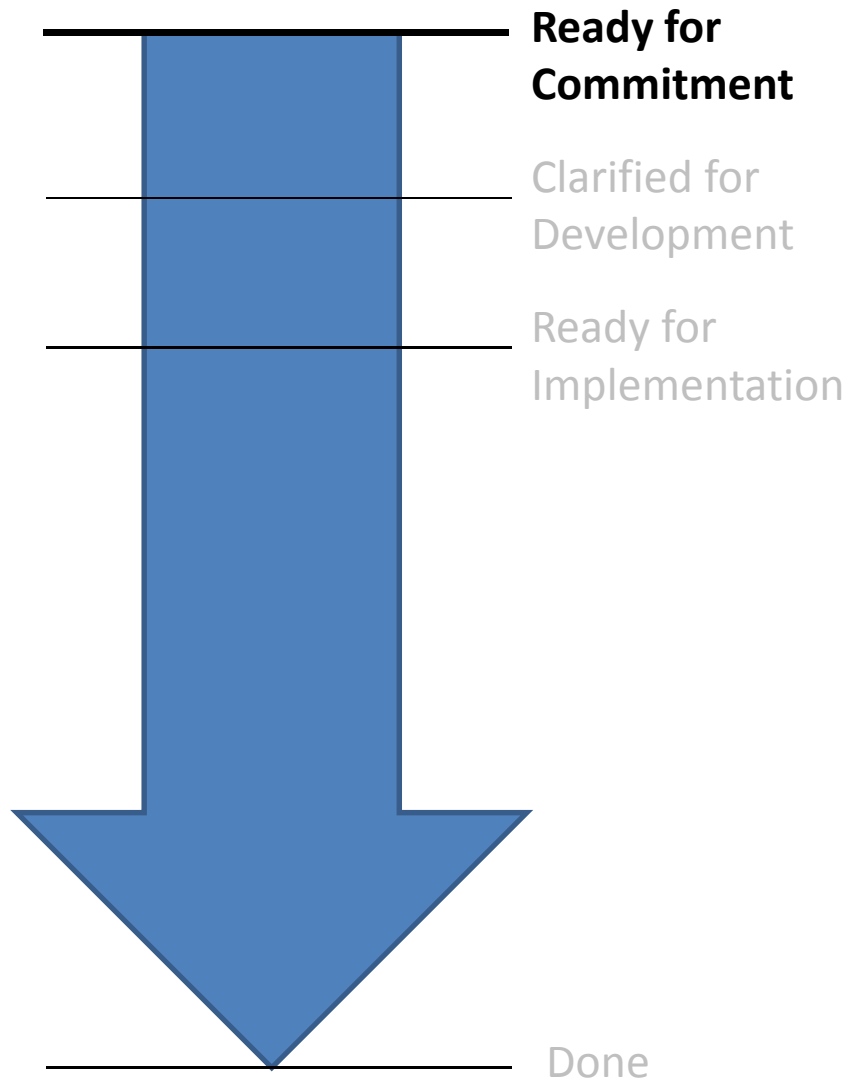
Feature life-cycle



Shared Responsibility Towards a Common Goal

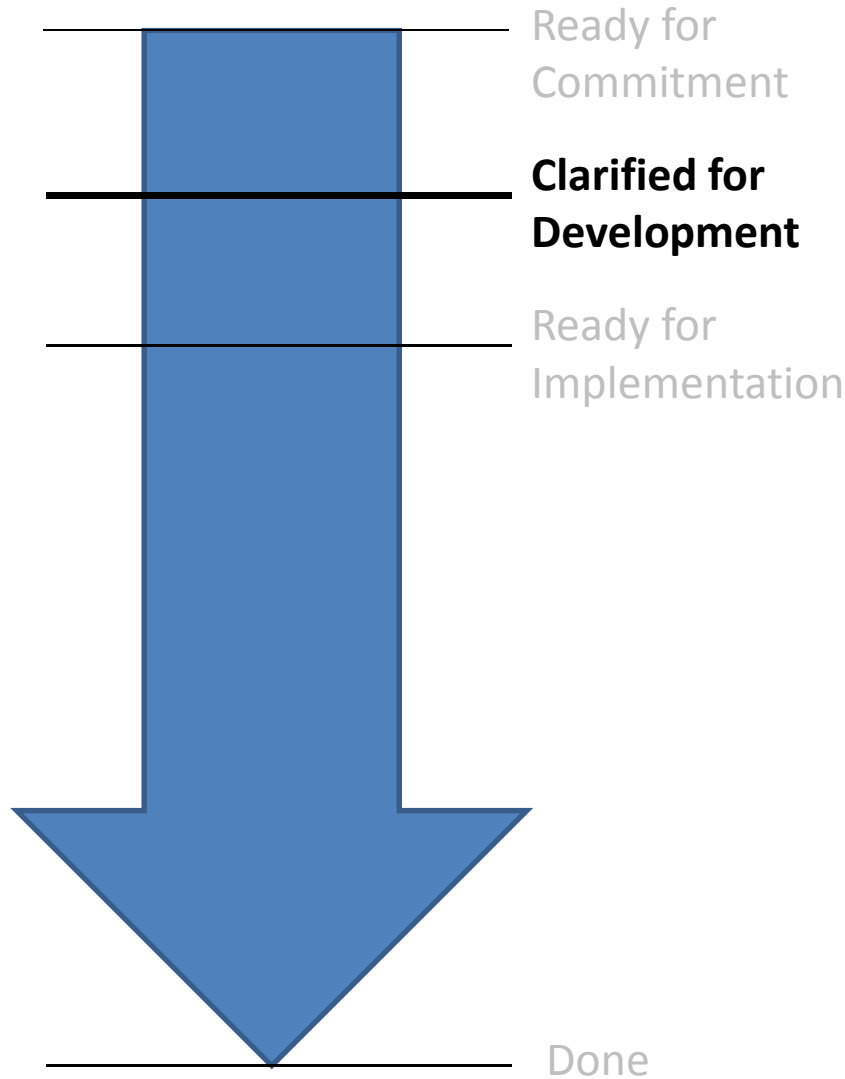


Ready for Commitment



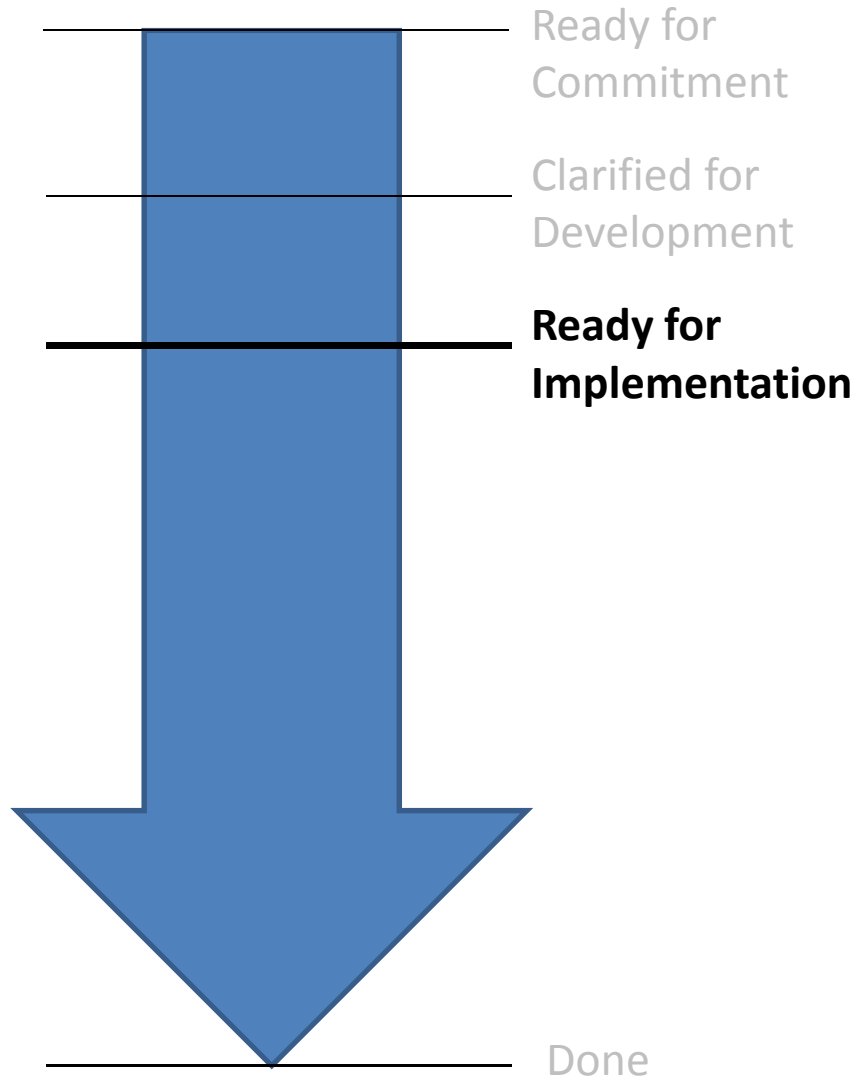
- Operational needs, scoping, acceptance criteria, architectural issues, implementability, testability, and risks
- Common understanding
- Stakeholder commitment
- Credible ROM estimate

Clarified for Development



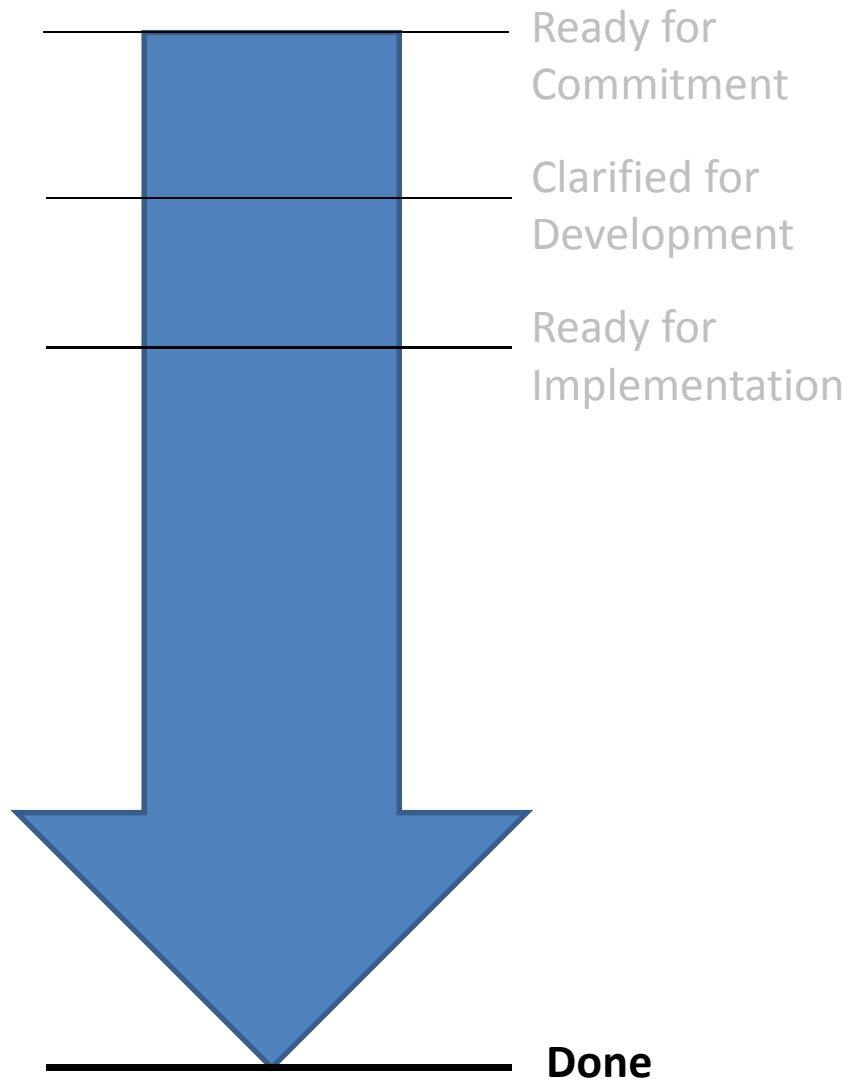
- Baseline requirements
- Plan actions necessary to address unknowns, assumptions, constraints, concerns, and risks
- Finalize acceptance criteria

Ready for Implementation



- The feature is sufficiently well understood by all stakeholders.
- The feature has been sufficiently decomposed into stories and other activities
- Draft test design specified

Done



- Feature is implemented, and quality assurance has been performed
- System and acceptance test performed
- Knowledge consolidated in permanent work products

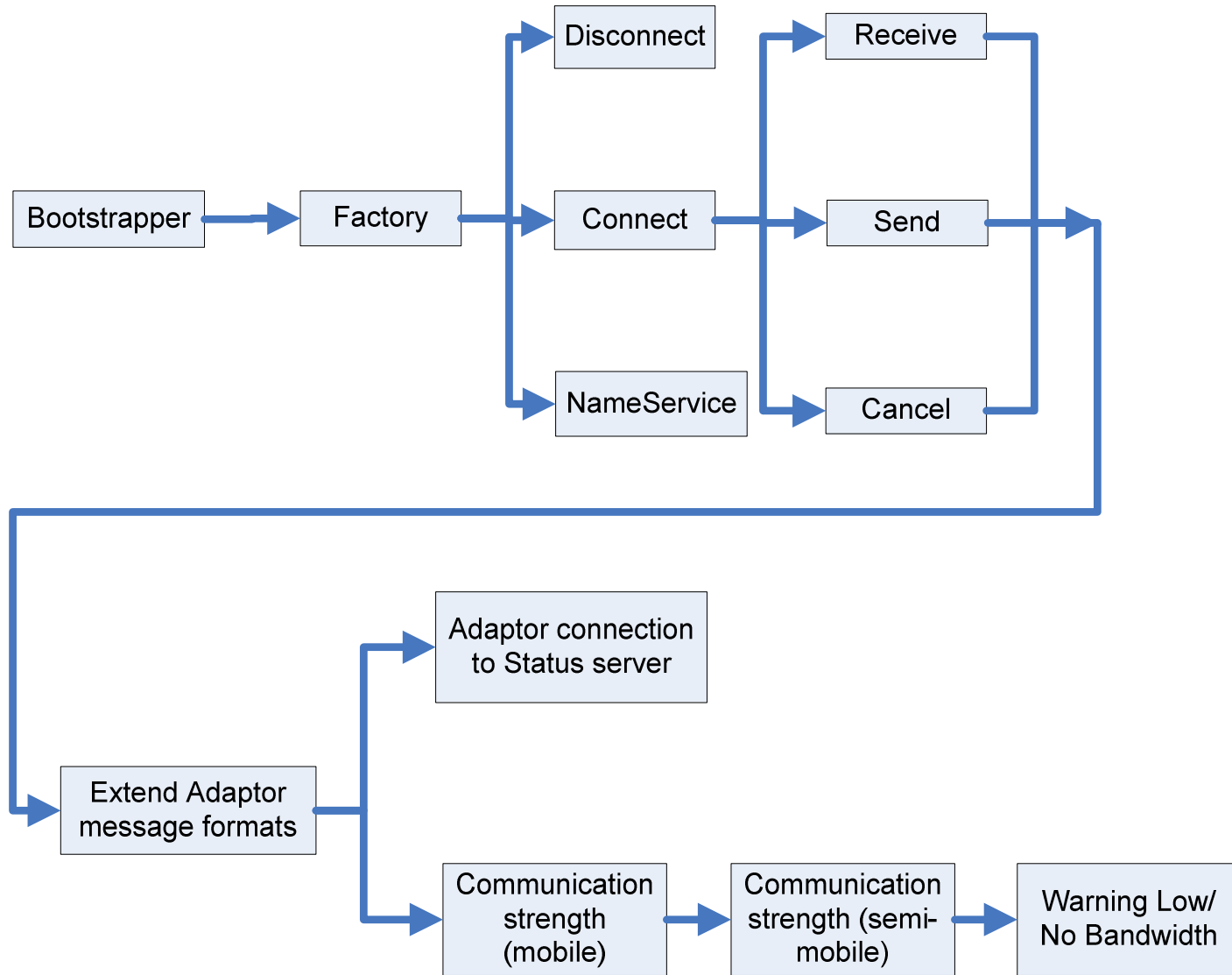
Story

A tiny software development project whose purpose is to produce an integrated and tested version of the system that realizes a new and small incremental part of a feature.

Desirable Properties of a Story

1. Production code is written
2. A clear goal
3. Manageable size
4. Touch all layers

TACCOMS Story Dependencies



Story Completion Checklist

Story: _____
Feature: _____
Developers: _____
Inspected by: _____

Activity	Work Product(s)	Completed	Inspected
Story scope and estimate reconsidered	_____	<input type="checkbox"/>	<input type="checkbox"/>
Development environment established	_____	<input type="checkbox"/>	<input type="checkbox"/>
Requirements drafted	_____	<input type="checkbox"/>	<input type="checkbox"/>
User interface drafted	_____	<input type="checkbox"/>	<input type="checkbox"/>
Technical design drafted	_____	<input type="checkbox"/>	<input type="checkbox"/>
User documentation drafted	_____	<input type="checkbox"/>	<input type="checkbox"/>
Test design drafted	_____	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>			
Requirements complete	_____	<input type="checkbox"/>	<input type="checkbox"/>
Existing manual tests identified	_____	<input type="checkbox"/>	<input type="checkbox"/>
Tests drafted (and coordinated with the Test Designer)	_____	<input type="checkbox"/>	<input type="checkbox"/>
Code drafted	_____	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>			
Manual tests complete	_____	<input type="checkbox"/>	<input type="checkbox"/>
Automated tests complete	_____	<input type="checkbox"/>	<input type="checkbox"/>
Test design complete	_____	<input type="checkbox"/>	<input type="checkbox"/>
Code complete. (User interface inspected by UE)	_____	<input type="checkbox"/>	<input type="checkbox"/>
Manual tests executed and passed	_____	<input type="checkbox"/>	<input type="checkbox"/>
Technical design documentation complete	_____	<input type="checkbox"/>	<input type="checkbox"/>
User interface documentation complete	_____	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>			
User documentation complete	_____	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>			
Story integrated (and integration tests passed)	_____	<input type="checkbox"/>	<input type="checkbox"/>



Story complete
 Date _____ Developers _____ Inspector _____

Integrated Testing



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Story Completion Checklist

Story: _____
Feature: _____
Developers: _____
Inspected by: _____

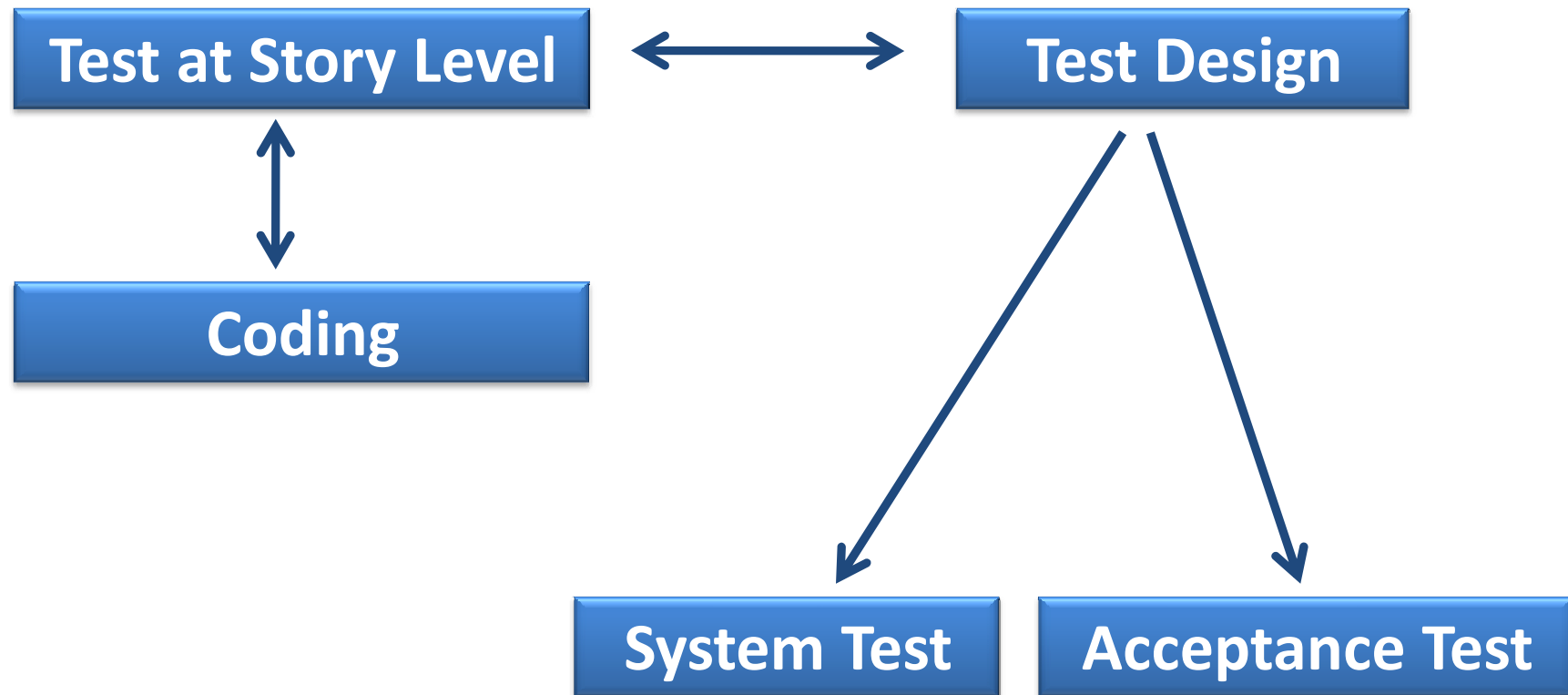


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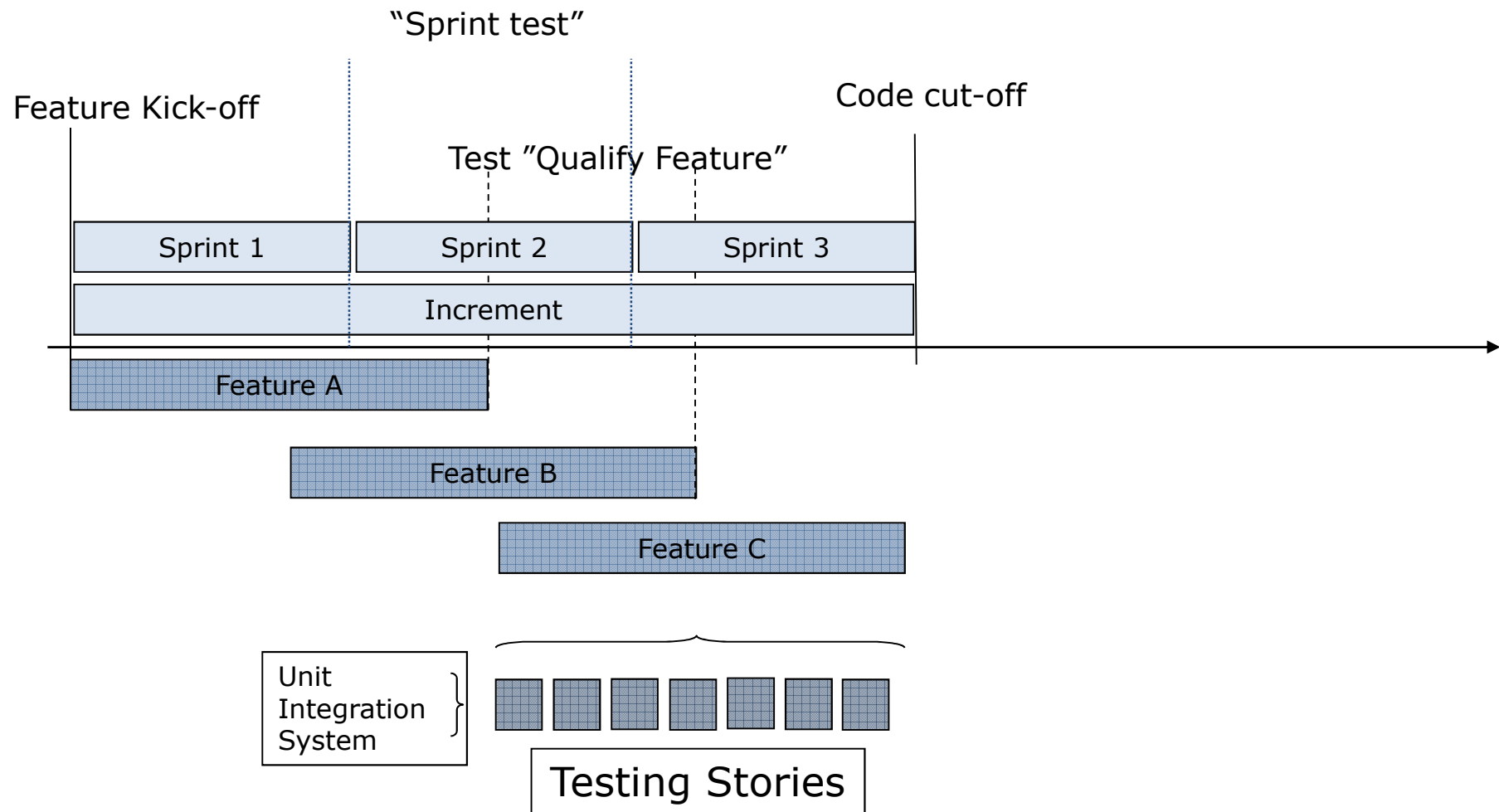
Story complete
 Date _____ Developers _____ Inspector _____

Done

Testing at Several Levels



Test in Development



Summary

Weaknesses

- Doesn't address scenario-based testing
- No focus on architecture
- Inspectors are bottlenecks

Strengths

- Shared responsibility
- Knowledge sharing
- Good fit to Scrum
- A strong conceptual framework
- Lightweight quality assurance – at your desk
- Scalable process



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