

## Agile Contracting The challenges of velocity and quality

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# Agile Contracting – The Challenges Agenda

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- Why Agile?
- What is Agile?
- Velocity and Quality
- Velocity and Quality in Agile contracts
- Conclusions





# Why Agile?







#### Why Agile?

Agile deliveries are value driven







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# What is Agile?



## What is Agile?

A philosophy

- A way of organizing yourself to achieve flexibility with respect to business objectives
- Agility means anticipation on change and focusing on value
- Flexibility is required due to a constantly, rapidly changing world around us
- Agile is not Scrum or Kanban
- Moving to an Agile way of working requires a fundamental change of:
  - Culture
  - Behavior
  - Attitude
- Agile development relies on traditional software development fundamentals
  - just approaches them to focus on value





## **The Agile Manifesto**

Value on the right; Value on the left

We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:



While there is value in the items on the right, we value the items on the left more







# Velocity & Quality



#### **Velocity and Quality**

Except Value and Velocity is monitoring of the Quality important





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## **Budget & Quality in SAFe<sup>©</sup>**

Built-in software quality



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#### **Velocity and Quality measurement - 1**

Define, Measure, Improve



#### **Definition of Done**

Ready for UAT or Production

Example of Definition of Done:

- Code is peer-reviewed and refactored
- Code is deployed to test environment
- Code has passed the static code analysis
- Feature is tested against acceptance criteria
- Feature passes regression testing
- Feature passes smoke test
- Feature passes performance test
- Minor defects logged within product backlog for prioritization
- Feature is documented / Product backlog updated with notes and documentation
- Feature ok-ed by UX designer
- Feature demonstrated in Sprint review
- Feature/Stories accepted and signed off by Product Owner

A shared understanding of which (acceptance) criteria a feature must satisfy to be releasable. They have to provide value and they have to meet a certain quality standard



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#### **Velocity & Quality measurement - 2**

Collection of (historical) data



#### **Velocity and Architecture - 1**

Built in quality due to (right) architectural decisions



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#### **Velocity and Architecture - 2**

Built in quality due to (right) architectural decisions





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# Velocity and quality in Agile contracts



## **Velocity and Quality in Agile contracts**

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Contracting

*"If we can continuously ensure we are delivering on our promises, the client is successful, and we're going to be successful too."* 

- The contract is a **legally binding agreement** which recognizes and governments the rights and the duties of the parties to the agreement
- The contract describes the **terms and conditions** defined for both the client and supplier to enable a successful delivery
- The contract describes the **scope of supply** based on the client demand translated by the supplier in a proposed solution



#### **Contract and Proposal aspects**

#### **Contractual agreements**

- Controlling specifications
- Governance and dispute resolution
- Budget and Payment
- Reporting / KPIs
- Acceptance
- · Changes to supply
- Intellectual property
- Warranties and Indemnities
- Liability
- Termination

#### client demand

- Scope
- Budget
- Schedule
- Quality



## **Velocity and Quality in Agile contracts**

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Collaboration & interaction



#### **Estimation**

Ensure we are delivering our promises

#### Scope has been defined but

- What will fit in a sprint?
- What will fit in an increment?

#### Sizing of the scope

- Features are on a high level
- Stories are one liners; As a <role> I want <....> such that <....>

Size has been defined but

- Size in Function Points (FP's) and Story Points (SP's)
- What will be the team productivity (hr / FP's)
- What will be the team velocity (SP / Sprint)?
- How representative is historical data?



#### **Team efficiency**

Depends on the quality of the process, products as well as the team optimization

- Team efficiency depends on the quality of the sprint backlog
- Product management is responsible for providing the stories based on the defined features
- The product owner will work with the team to clarify the user stories
- User stories must be detailed enough to be able to make an accurate estimate for the sprint
- A Definition of Ready is applied to verify if the user stories are detailed enough
- A Definition of Done is applied on the sprint results



## **Optimal team performance requires time**

Team performance will increase over time

#### **Tuckman's Team & Group Development Model**





## **Definition of Ready**

Ready for realisation by the team

- Example of Definition of Ready:
  - Description clearly articulates the role, action and benefit
  - Acceptance criteria clearly defined
  - User Experience requirements and artifacts (e.g. wire frames) included
  - Supporting documents (e.g. business rules) referenced and/or included
  - User Permissions defined (if applicable)
  - Performance criteria defined (if applicable)
  - Mapped to a Feature and classified as parity or enhancement
  - Product Owner identified and has approved the user story
  - Development team has reviewed and confirmed they understand
  - Includes initial estimation (in story points ) of complexity
  - Can be finished in a single sprint
  - Sprint Review demonstration expectations defined

A set of minimum criteria before it's ready for inclusion in the work of the next sprint, agreed by the Scrum team

#### **Agile contract matrix**

Contract types vs Contract aspects

	Controlling specifications	Governance and dispute resolution	Budget and Payment	Reporting / KPIs	Acceptance	Changes to supply
Flexible contract based on team size, basicly secondment (T/M) with minimum reporting	high level	limited	hourly rate	indicative per sprint	DoD/ sprint MVP/ PI	implicit backlog
<b>Contract based on a defined team (cost) rate,</b> secondment, including a.o. mutual governance and management, as an effort obligation.	high level	full range	per sprint or Pl	extensive	DoD/ sprint MVP/ PI	implicit backlog
<b>Unit / Output based contract,</b> all of the above, including KPI's, as a result obligation	high level	full range	per unit (eg. function point)	extensive	DoD/ sprint MVP/ PI	implicit backlog
<b>Scope based contract,</b> (scope is largely fixed, budget is indicative)	detailed	full range	milestones?	extensive	acceptance criteria(!)	Explicit contract change
<b>"Outcome" based contract,</b> where agile delivery becomes part of a "business process", with a result obligation	detailed	full range	per achievement?	extensive	outcome?	Explicit contract change

Maturity

#### **Delivery risk vs Agility / Agile Maturity**



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#### **Delivery risk vs Agility / Agile Maturity**



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## Conclusion

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- Agile is flexible but requires a continuous focus on velocity and quality from a delivery perspective
- Software quality and velocity are important KPI's in Agile contracting (measurements on team level)
- Contract management becomes important if the delivery is not according to expectations
- The type of contract is depending on the maturity of both the client and the supplier





# Questions?





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