Contract Data Requirements List (CDRL) Reviews and Agile

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Document Markings

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The Problem Statement

Question: Does the Contract Data Requirements List (CDRL) review and approval process change under Agile?

Answer: It depends!

Historically, CDRL deliveries (approval CDRLs¹ in particular) are scheduled on a periodic basis. For example:

- Preliminary Design Review (PDR) –45 days
- Critical Design Review (CDR) –60 days

Govt Program Office typically has 30 days to review, respond, and approve

- Small "army" of reviewers/SMEs needed
- Large effort in short amount of time

¹ Approval CDRLs are those deliverables that require formal government review and approval before they can officially be accepted.

Agile Impacts

One of the 12 Agile Principles state: "Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale."²

Why can't this be applied to documentation as well?

Recall "Working software over comprehensive documentation" in the 4 key principles of the Agile Manifesto.

- Documentation is software—right up until you cue it to the printer!
- DoD programs tend to be documentation heavy, depending on several variables (e.g., certification requirements of the system, sustainment approach gov't vs. contractor, etc.). Some of the documentation is needed to support other related activities.

^{2 &}quot;The 12 Principles Behind the Agile Manifesto", https://www.agilealliance.org/agile101/12-principles-behind-the-agile-manifesto/

Prime Contractor (Developer) Considerations

- Have the end-state of the document in mind
- Determine what portions of the content can be worked on
 - Include the basic outline
 - Frequency of delivery
 - Deliveries based on a Sprint cycle (2+ weeks) would not necessarily be achievable given approvals needed
 - Consider larger frequencies (e.g., quarterly) to allow time for staffing and feedback
 - Lends itself to incremental development and delivery
- Consider making the documentation updates part of the Definition of Done criteria at the Sprint level
- Revision changes/updates will need to be identified between deliveries (e.g., change bars) for the reviewers
- Could there be a Scrum team handling documentation?

Govt Program Office Considerations

- Fundamental process (delivery, review, comments and consolidation, acceptance determination) would remain the same, however
 - Smaller amount of content to review
 - After initial delivery, subsequent deliveries would focus on revisions
 - Decrease in amount of review time needed
 - Smaller, more frequent deliveries of content would decrease review time (gives them back more time for other tasks)
- Two key considerations for this approach:
 - Staffing is consistent
 - Determination needs to be made & agreed upon on what would be "acceptance" milestones contractually

Tool Use & Authoritative Source Considerations

Historically the CDRL cycle involved

- Contractor creating the document
- Delivery of the document to the govt Program Office for review & approval
- Updating the document file with noted changes for regeneration later

What if a different method (supporting collaboration) such as a Wiki was used instead?

- Potential to speed up the process
- Wiki would serve as the authoritative source of the document
- Could be generated from the Wiki for final delivery
- Precedents for this approach already exist³

³ https://mdotwiki.state.mi.us/design/index.php/Collaborative_Milestone_Review_Process & https://www.ncbi.nlm.nih.gov/books/NBK82274/

Problem Statement Revisited

Question: Does the Contract Data Requirements List (CDRL) review and approval process change under Agile?

Answer: *It depends! It can and it should!*

Agile methods for CDRL delivery, review and acceptance can be achieved

- Requires collaboration, coordination & planning (both sides)
- Requires reviewer (staff) consistency by the government Program Office

Questions



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