



# Value-driven CMMI:

An Agile-based Approach to CMMI

*Implement and appraise CMMI using agile practices to produce frequent delivery of intended organizational value while removing waste and overhead*



# Outline

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“I have never seen a CMMI appraisal implemented like this before. This is so much better.”

- Project team member

## 1 Introductions

Introductions and setting the stage

## 2 Overview

Overview of CMMI, its intentions, and applicable history

## 3 Shared Interest

Show how CMMI aligns with agile

## 4 Value-driven CMMI

Share a value-driven agile-based approach to CMMI implementation as well as appraisal preparation describing agile mindset, practices, and tools

## 5 Q&A

Questions and audience-driven discussion

# Learning Objectives

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- CMMI is a valuable model when implemented in a valuable way
- Understand the commonality between Agile and CMMI
- Hear key changes in the CMMI v2.0 model and supporting appraisal method
- Know that a value-driven agile approach can be used to implement CMMI and facilitate appraisal preparation, and understand why it is so beneficial to do so

# Who We Are



## Tara Lemieux

- 25+ years working within National Level, Military Intelligence, and Commercial industries to ensure compliance with applicable laws, methodologies and standards
- Lead Auditor for ISO 9001, 27001, 20000-1, CSM, and CMMI Early Adopter
- Author of the book, "So, You're Planning an Appraisal: The Complete Guide to CMMI Appraisal Management"
- Lead Innovator, seeking opportunities to encourage value while building internal capabilities



## John Hughes

- Organizational Coach, Lead Sevatec's Business Agility practice
- 21 years Federal IT delivery
- Participated on both sides of the table over 4 CMMI appraisals in the early 2000s
- On the organization's side for a current CMMI appraisal

# How We Came to Be



## A New Perspective

### Major Frustrations:

- Not creating value for the organization
- Overhead and waste to “check a box”
- Long stages of effort to implement and prepare before any feedback or potential benefit

### Proposed Solution:

- Effect a shift in perspective; move away from an artifacts-driven approach to a value-driven approach
- Develop a method that places the needs of the organization over that of the external standard
- Focus on evolving internal capabilities

### Major Frustrations:

- Appraisal preparation cycles were often long and very costly
- Too focused on artifacts, too little about value
- Method encouraged stove-piping of organizational efforts, subsequently diminishing ROI

# Typical Impediments



Organizations struggle to realize benefit to their investment

Day-to-day operational pressures impede the organization's ability to beneficially engage improvement efforts

Traditional command-and-control approach causes perception of overhead and burden, does not create ownership in the right place

Typically seen by organizations as a check-the-box activity so that they may compete for work requiring CMMI credentials

CMMI community has a lot of folks still stuck in traditional beliefs, working in traditional ways



# What is the CMMI?

“The Capability Maturity Model Integration (CMMI) is a globally recognized set of best practices that enable organizations to improve performance, key capabilities, and critical business processes.”

*Source: CMMI Institute*

More importantly, the best practices provided present a succinct means by which organizations may expand their existing capabilities, resulting in:

- Reduction in re-work and re-planning efforts;
- Improved efficiencies across business units;
- Improved program insight, control and tracking; and
- Higher customer satisfaction.



# Look, We All Want The Same Things

CMMI intent...

- A flexible, integrated means of helping organizations build and measure capabilities in order to improve performance and align operations to business goals
- CMMI helps organizations understand their current level of capability and performance and offers a guide to optimize business results

Don't agilists want these same things?

- A goal-oriented, data-driven approach to continuous improvement and delivery maturity
- Consistent ability to delivery highest quality business value



# Value-driven Approach

## Alignment to Value

- Establish and communicate purpose and intended value
- Prioritize Implementation backlog by organization's greatest needs
- Focus on those things that bring the greatest maturity, soonest

## Enabling Org Structure

- Enable the right behaviors and ownership
- Delivery programs own CMMI success, not the SEPG
- SEPG "just another team" with a role to perform

## The Right Mindset

- Mindset of partnership and value, not centralized command and checking boxes
- Fast feedback for continuous improvement
- Creating a culture of learning

## The Right Team

- Cross-functional team of implementation leads to scale across the org
- Internal change team/SEPG to partner with organization and programs

## Tools and Visual Radiators

- Enable effective tracking and management, communication, and shared awareness
- Efficient collaboration
- Connect all the dots, aggregate the experience
- Tell the story, not just the list of practices and artifacts

## Measure Value Delivered / Continuous Improvement

- Sprint Reviews, Retrospectives, Burn charts
- Measure value delivered
- Continuously improve to seek ever greater value
- Build continuously more confidence over time

## Lean Agile Implementation

- Remove waste and overhead; Lean out traditional practices that added little-to-no value
- Focus on the intended benefit, not an indirect measures
- Leverage modern tools to "document" and share awareness
- Limit WIP
- Scrum-based approach for frequent delivery of value
- Collaborative Workshops – similar to Pair Programming
- Update Wikis each Sprint to tell each program's "story"
  - No More PIID!!!



# Updates to the CMMI model and Appraisal method

- ISACA realized the need to change in order to create greater benefit to organizations
- Feedback indicated that appraisals were too cumbersome and costly
  - lacked ability to inform more modern practices used by many organizations
- Realized the need to relax expectations related to artifacts generation
- Adopted a performance-oriented appraisal method to improve the reliability and consistency of benchmarking while reducing preparation time and lifecycle costs



# The Agile Profile

A guide to strengthening Agile performance  
with the Capability Maturity Model Integration\*



**CMMI** Institute

# Benefits of This Approach

- Organization and participants much *happier* and *appreciative*
- Greater *value* created *sooner*
- *Ownership* of delivery maturity / quality transferred to the *delivery programs*
- *Reduced risk* and allowed quick increases in *confidence*
- More *consistent*, higher *quality* practices and deliverables
- Approach accommodates *numerous* benchmarking methods and standards
  - Enterprise approach rooted in agile used for ISO audits as well as CMMI appraisal





# Resources

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- CMMI and Agile: <https://cmmiinstitute.com/special-pages/agile>
- “CMMI, the Agile Way”: <https://cmmiinstitute.com/resource-files/public/marketing/document/cmml-the-agile-way>
- “Agile Comes with Maturity”: [https://cmmiinstitute.com/resource-files/public/marketing/article/agility-comes-with-maturity-\(1\)](https://cmmiinstitute.com/resource-files/public/marketing/article/agility-comes-with-maturity-(1))
- Agile with Scrum and CMMI® Working Together to Create True Organizational Agility (Webinar):  
<https://www.youtube.com/watch?v=TqqugPYedmY&feature=youtu.be>



# Q&A



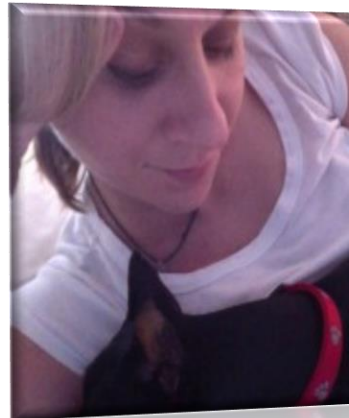
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