

CMMI and Agile: Is a Bridge Needed Between These Two Methods?

Agile development methods and CMMI best practices are commonly used in the industry to develop products and services. However, they are often perceived to be at odds with each other. The Agile Manifesto succinctly summarizes the differences with these two approaches as follows.

“Individuals and interactions over processes and tools
Working software over comprehensive documentation
Customer collaboration over contract negotiation
Responding to change over following a plan. “

“That is, while there is value in the items on the right, we value the items on the left more.”

CMMI is commonly depicted with items on the right. It is thought to be heavy requiring activities reliant on process definitions, measures, and artifacts and generally driven by management. Agile is known for its light-weight processes with the focus on individuals and short cycles. Are these two methods that different and are they at odds with each other? If these perceptions or their causes are not resolved, we are likely to see more confusion and conflict as the adoption of each increase. In the long term, this situation is not healthy for the software engineering profession. Is it important to provide education and training in each of these methods to help bridge the gap to ensure that software engineers have the necessary foundation to build today's products.

This panel will look at CMMI and Agile and discuss whether the discord between Agile and CMMI camps need to exist or whether Agile and CMMI can be used together to dramatically improve business performance when properly used together. We will have 3 panelists. One will discuss CMMI, one will discuss Agile, and the other panelist will discuss the importance of looking at these two methods together. We will explore how each method addresses process discipline, creativity, and risk-taking. Does process discipline cripple creativity? Is one methodology more risk-averse than another? How is innovation and changing requirements handled?

Mary Beth Chrissis is a senior member of the technical staff and the CMMI Training Manager at the Software Engineering Institute (SEI). Since joining the SEI in 1988, Chrissis has been a coauthor of all releases of the Capability Maturity Model® for Software and all releases of the Capability Maturity Model Integration® development models. She is an author of “CMMI: Guidelines for Process Integration and Product Improvement” and “The Capability Maturity Model: Guidelines for Improving the Software Process.” Chrissis is a member of the CMMI Architecture Team and CMMI Model Team. She is the manager of the CMMI Training Team, which is responsible for the development and deployment of the SEI’s process improvement courses. Previously, she managed the CMMI Interpretive Guidance Project, which focused on understanding and addressing CMMI adoption issues. Chrissis chairs the CMMI Configuration Control Board, is a member of the IEEE Software and Systems Engineering Standards Committee Executive Committee, and is an instructor of various CMMI model-related courses at the SEI. Prior to joining the SEI, Chrissis worked at GTE Government Systems in Rockville, Maryland developing a voice processing system.

The three panelists that I plan to ask to participate include:

Dave Anderson/Esther Darby: Agile

Mike Campo/Kathy Smith/Lynn Penn: CMMI

Hillel Glazier: CMMI and Agile