Advancing Quality Credentials: Staying Aligned with Changing Business Demands

Realizing Momentum through the Combined Use of CMMI-DEV and CMMI-SVC

By Collette Dziemian, VP of Quality Programs and Pamela Schoppert, Senior Process Advisor

Investment in Quality is Essential to Our Business Engagements

People, process, and technology are the foundation for successful projects. In the modern IT arena, none of these elements can stand alone and their synergy results in a more effective operational environment. Hire good people give those resources the tools they need, and you ensure an established and efficient process structure to accomplish the work! *Customers can expect higher probability of success in schedule, cost, and quality from companies that focus their efforts on, and invest in, these areas.*

Selecting and blending best practices for our customer engagements allows Citizant to create the most appropriate process roadmap for projects. Marrying existing customer lifecycles and standards with IT experience and proven process assets results in an integrated process structure that is written in customer terminology and tailored to be optimal for the particular engagement and project domain. C*ritical to an organizational quality program is the selection of the process model or standard by which to benchmark the organization.* This white paper provides insight into recent advancements in applying such quality standards as the CMMI® (Capability Maturity Model® Integration) v1.3. Further, based on analysis of Departments of Justice and Treasury strategic plans, it highlights a spectrum of IT projects types and the need to understand how quality initiatives apply differently to each project.

Citizant's Quality History

The evolution of IT-related process standards over the past few decades has shown that these points of reference take many forms. From TQM to ISO to CMMI, industry is rich with models by which to benchmark performance capability. For Citizant, the selection of process models was based on customer need, consistent terminology, and applicability to varying program types. Further, Citizant sought value for its customers through standardization and adoption of a globally recognized standard, emphasizing proven management and technical disciplines. Our quality history includes the following milestones:

- 2006: Citizant aligns and appraises business processes against the Software Engineering Institute (SEI) CMMI.
- 2008: Citizant achieves successful organization-wide appraisal at CMMI Maturity Level 3.
- 2009: CMMI for Services is released. Based on analyzing this model for adoption, it became apparent that with the nature of the IT industry and company's forecasted business plan, CMMI for Services was a natural fit into the process structure of Citizant.
- 2011: Industry usage of the CMMI continues to advance with 7629 registered DEV appraisals, 68 registered SVC appraisals, and only 3 leading edge multi-model appraisals registered as of mid year.

Citizant retains a strategic relationship with SEI, including partnering on model development efforts and industry working groups.

- 2011: Citizant underwent a successful CMMI-DEV v1.3 ML3 and CMMI-SVC v1.3 ML2 multi-model appraisal using the most recent appraisal method. *This was a significant milestone as it is one of the first appraisals to use v1.3 and the first multi-model appraisal reported to the SEI.*
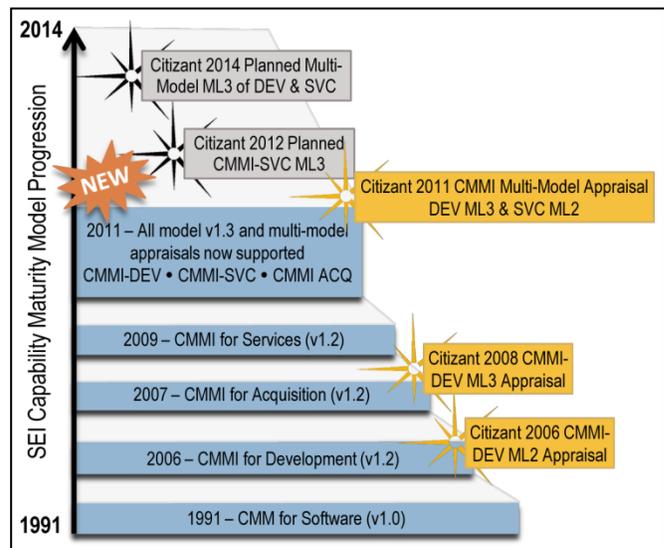
The Business Value of a Multi-Model Process Program

"Services" are a part of most projects, including development projects. Therefore, it is logical for an IT company to address both CMMI-DEV and CMMI-SVC within their process efforts. An example is an engineering project focused primarily on integration and configuration using advanced toolsets (e.g., Oracle). These configurable systems include pre-developed features and modules. Some tailored, developmental customization may be needed; however, the majority of the project effort will involve technical services such as understanding business needs, managing interfaces, and configuring the toolset based on subject matter expertise. Another cross-model example is in the evolution of development projects. Often, after the creation of the newly-developed system, these projects can morph into services projects, involving help desk, maintenance, enhancement, and deployment support.

Further, based on our analysis and utilization experience of CMMI-DEV and CMMI-SVC, we have found that certain process areas (PAs) specific to CMMI-SVC can be more easily applied based on the type of service being performed. Service Delivery (SD) can be applied to most efforts since this is the "just do it" PA of services, which is built upon the processing of service requests. Other services areas, such as Capacity and Availability Management (CAM) can be applied more readily to services that process service requests frequently. Service Continuity (SCON) is necessary for all service projects, but is extremely important in mission-critical project domains that require real-time response. Many other lessons learned and adoption experiences were a result of our recent multi-model appraisal.
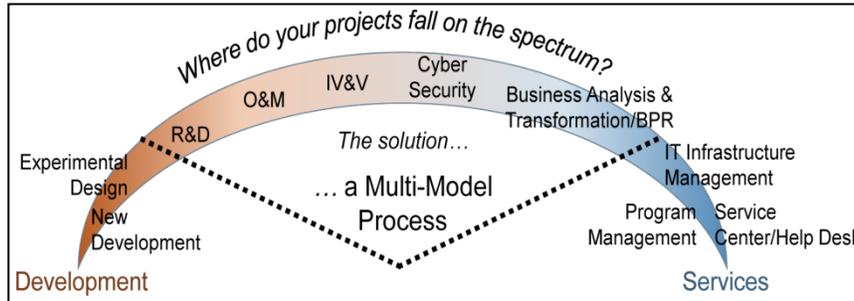
IT projects span a spectrum of efforts, and each engagement is unique. *We propose that a commonality for most of these efforts is their potential to benefit from the shared best practices in both the development and services CMMI models.*

Ultimately, the decision to use multiple, integrated models is one that each organization must make after thorough analyses of the current and forecasted business domain. Benefits that can be realized include:

* a singular focus on quality initiatives;
* common language across projects or work entities;
* collaborated investments for appraisals and other process improvements efforts;
* increased likelihood of on-time, on-budget delivery;
* optimized operational environment, and more.

Additionally customers report that these mature practices enable their own success in attaining excellent government audit ratings.

Where do your projects fall on the spectrum?

The solution… … a Multi-Model Process

Development — Experimental Design, New Development, R&D, O&M, IV&V, Cyber Security

Services — Business Analysis & Transformation/BPR, IT Infrastructure Management, Program Management, Service Center/Help Desk

Conclusion

Understanding the structure and content of process capability models and their applicability to differing projects environments is essential before an organization decides to "appraise" or a customer mandates a specific process credential. The use of an integrated process structure, blending CMMI for Development and CMMI for Service best practices, has been shown to be the ideal fit for leading-edge technical solution and service companies, such as Citizant. Customer and partner organizations with similar operational environments and project types can benefit from working with organizations that understand, and have implemented, a multi-model approach.

Citizant partners with government organizations to develop forward-thinking business and technology solutions that create a better future for all citizens. Citizant specializes in enterprise architecture, custom application development, and program management support. Citizant has been independently appraised at SEI CMMI-DEV ML3 and CMMI-SVC ML2. Citizant is a fast-growing business headquartered in Chantilly, VA. Visit us at www.citizant.com.