

# Perficient Chennai Increases Agile Adaptability Across the Enterprise Using CMMI® Framework

## Company Background

Perficient is the leading digital transformation consulting firm, serving Global 2000 and enterprise customers throughout North America. Its information technology, management consulting, and creative capabilities equip the company and its digital agency to deliver vision, execution, and value with outstanding digital experience, business optimization, and industry solutions. The company's work enables clients to improve productivity and competitiveness; grow and strengthen relationships with customers, suppliers, and partners; and reduce costs. Perficient's professionals serve clients from a network of offices across North America and offshore locations in India and China.

## THE BUSINESS NEED

Perficient Inc. inherited agile practices through a 2007 acquisition of a consulting company. Perficient Chennai was able to adapt these practices at an early stage, as the company realized that it was critical that the products delivered from its Chennai location required both high consistency and quality.

To ensure that the agile best practices are followed consistently across the organization, Perficient Chennai needed to improve its agile quality management system (QMS) and expand its application across projects. The company established a baseline on a measure of productivity and quality metrics to better monitor and control projects, resulting in delivery excellence.

Project teams were following various agile project-management methodologies such as scrum, test-driven development, and extreme-programming practices in executing projects. While the practices adhered to the agile principles of a focus on people, communications, products, and flexibility, they still brought several challenges:

1. The teams had been spending a considerable amount of time tailoring processes to suit individual projects and make them align to the organization's QMS.
2. The onshore-offshore model of project execution, with software being developed between multiple global development centers, had its own set of practices and procedures.
3. Each project had its own best practices, but they were not scalable at the organizational level.

It was crucial that Perficient Chennai establish baseline processes, procedures, and practices that were mature and well defined. With those guidelines in place, they could be scaled to deliver diverse projects across various technologies throughout the organization.

## THE SOLUTION

Perficient Chennai adapted CMMI® for Development to establish the standard processes necessary to meet strategic objectives around consistency and quality across the enterprise for its agile implementations. Perficient deployed CMMI® for Development (CMMI-DEV, V1.3) to earn a Capability Maturity Model Integration (CMMI) Maturity Level 3 rating in 2013. Perficient Chennai has been recently reappraised at Maturity Level 5, the highest level an organization can attain, and it now ranks among the few thousand companies worldwide to achieve that rating.

Perficient Chennai enabled CMMI to build capabilities for continuous improvement that the company to deliver with high consistency and quality. Some of the key factors for Perficient Chennai achieving the highest maturity level included:

- Identifying key members of the organization to execute on the agile vision
- Analyzing the organization's existing agile methodologies
- Identifying the strengths and weaknesses in the organizational QMS
- Mapping process areas to specific agile practices
- Identifying agile best practices in each practice area and implementing them to set benchmarks for future projects
- Establishing a functional software quality-assurance team that would be responsible for spreading awareness of agile best practices coupled with QMS in the day-to-day implementation of projects, as well as executing quality checks to control and monitor all projects
- Using automation tools for certain practices to help reduce human efforts, increasing accuracy when gathering information and mapping the benefits to the maturity-model requirements
- Tailoring the processes to use additional automation tools while still adhering to the required practices and procedures
- Implementing a library to archive project knowledge and assets

“Our organization’s pursuit of excellence is not a choice, but a way of life. Consistent high-velocity product delivery is not an option, but a must; resources are not infinite, and innovation and optimization are the key elements for sustained business growth. CMMI, tagged with agile, enabled Perficient Chennai to achieve delivery excellence, returning higher ROI for customers. Our business trajectory is a direct byproduct of that delivery excellence.”

-PRAKASH CHEMBAI, MANAGING DIRECTOR,  
PERFICIENT

Perficient Chennai also uses the process-improvement framework to enhance the following areas that were not included in its agile methodologies:

- Establishing a center within the organization that supports the cross-training of team members
- Applying configuration-management processes
- Initiating process tailoring across different projects

## RESULTS

With CMMI in place, Perficient Chennai is able to control and manage key performance indicators, delivering consistent high-quality products at a greater value for its customers. CMMI has also enabled Perficient Chennai to introduce more automation and standardize agile QMS processes for its projects across the organization.

The results are evident:

- Reduced nonconformities reported on projects by 70 percent
- Implemented consistent agile practices on 80 percent of the company's projects
- 90 percent of the company's workforce has adopted agile best practices
- Implemented a managed process that is tailored to best practices from the organization's agile QMS in 100 percent of projects
- Nearly 85 percent of the Perficient Chennai project teams follow CMMI maturity level 4 and 5 practices for predicting a project's sprint velocity
- Achieved better monitoring and control of team-member productivity, which enhanced the productivity at the organizational level
- Verified process compliance in 90 percent of projects

Additionally, agile metrics are used for trend analysis, measuring internal defect density and tracking velocity of the scrum team during a sprint.

## BUSINESS BENEFITS

Operating at a CMMI Maturity Level 5 has enabled Perficient Chennai to identify and predict factors influencing key sprint velocity, resulting in higher productivity at the organizational level.

## LESSONS LEARNED

- Tailoring the company's agile QMS gives project teams the necessary freedom to choose best practices without compromising core values of process areas.
- Identifying key members of the organization to carry out processes and standards, as well as appointing a software quality assurance team to spread awareness of best practices, ensures nonconformities are reduced.
- Ensuring consistent best practices are followed across the company enables teams to share learnings and improve overall performance.



About  
CMMI®  
Institute

CMMI Institute ([CMMIinstitute.com](http://CMMIinstitute.com)) is the global leader in the advancement of best practices in people, process, and technology. The Institute provides the tools and support for organizations to benchmark their capabilities and build maturity by comparing their operations to best practices and identifying performance gaps. For over 25 years, thousands of high-performing organizations in a variety of industries, including aerospace, finance, healthcare, software, defense, transportation, and telecommunications, have earned a CMMI maturity level rating and proved they are capable business partners and suppliers.



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