CMMI Performance Solutions® Spotlight: Postal Savings Bank of China

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CMMI Performance Solutions

中国邮政储蓄银行
POSTAL SAVINGS BANK OF CHINA

About PSBC

The Postal Savings Bank of China Co., Ltd. (PSBC) was established in 2007. With approximately 40,000 outlets and more than 660 million individual customers, PSBC strategically focuses on providing financial services to agriculture, rural area and farmer (Sannong) customers, urban and rural residents, and small to medium enterprises. Relying on its unique model and resources featuring directly operated outlets and agency outlets, it is committed to meeting the financial needs of the most promising customers during China's economic transformation through innovation and high-quality development.

For more information, visit **www.psbc.com**

The Challenge

PSBC's Software Research and Development (R&D) Center is the driving force behind the bank's IT platform. Over ten years of development, it has continuously utilized technology to empower the entire bank to accelerate its transformation into a data-driven, channel-coordinated, retail-wholesale integrated, and operationally efficient new retail bank. The bank identified that it wanted to further increase productivity, reduce the high number of post-launch programmatic tickets and improve productivity.

> " Our Software R&D Center has established a comprehensive measurement and effectiveness system by drawing on CMMI quantified management requirements. This has effectively improved the visibility of the development process, enabling us to discover improvement points in terms of schedule, cost, and quality more promptly and accurately. "
>
> —Junfeng Hu, General Manager of Postal Savings Bank of China Software R&D Center

Selected Solutions

1 To establish clear testing management requirements for handling critical defects, and to introduce new testing tools, PSBC used Verification and Validation (VV) to standardize test defect management tools, promote the adoption of testing management platforms, and implement online management of system test defects

2 Technical Solution (TS) helped refine coding standards and code review sheets, promote sonar code scanning tools, and improve code review efficiency

3 Managing Performance and Measurement (MPM) added functionality to track the workload for developers in the defect management process, measure the defect repair workload for all projects, and establish baselines. Through statistical analysis of defect repair workloads, MPM helped identify teams and individuals with lower defect resolution efficiency, drive root cause analysis and create targeted solutions

4 Planning (PLAN) and Monitor and Control (MC) promoted the use of online task management tools. PLAN and MC also helped with embedding task management standards into the online tools, clearly defining that single tasks should not exceed 40 person-hours, and refine the granularity of task management

5 Peer Review (PR) helped to optimize the code review process by introducing professional code review tools, encouraging cross-functional teams to identify more code anomalies.

Selected Performance Goals Achieved

Programmatic Issue Tickets
Decreased by 26%

Labor Output Efficiency
Increased by 28%

System Test Defect Density
Decreased by 47%

Defect Reopen Rate
Decreased by 72%

Critical/Severe Defect Ratio
Decreased by 67%

Defect Resolution Rate
Increased by 70%

Lessons Learned

The Postal Savings Bank of China developed relevant improvement measures and the results have shown significant advances, with notable improvements in both engineering construction quality and research and development efficiency. To continue building on successes and continually improving performance metrics, PSBC established the following approaches:

- Comprehensive Training Plan: Conduct centralized training and provide targeted question and answer (Q&A) sessions to enhance each project team's understanding of high-maturity project management content.

- Weekly Checks: Carry out weekly checks on quantitative management outputs of project teams, including operational checks, cross-checks, explanations, and Q&A sessions, to promptly address bottlenecks in the promotion process.

- Customized Intelligent System: Enables quantitative management to be conducted online, encompassing functional modules such as performance models and process monitoring, assisting project teams in achieving real-time monitoring and online analysis.

PSBC's Maturity Milestones

2016 .... **2019** .... **2023** →

ML3 CMMI-DEV   ML3 CMMI-DEV   ML4 CMMI-DEV

> **The Postal Savings Bank of China has effectively demonstrated the 'how to' of CMMI through agile methods. It implemented DevOps pipelines, Scrum methodologies, and other agile practices, which were institutionalized through CMMI best practices. As a result, there has been a significant improvement in development efficiency, product quality, and the speed of requirement delivery.**
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> —Dylan Ren, CMMI High Maturity Lead Appraiser and Instructor

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