Table 10. Do we have better product quality

Name	Description	Calculation Formula
Defect Rate with Severity	Measures the software defect rate	*Number of defects (severity 1 and 2) in production / 100*
Number of External Problem Reports	Measures the total number of external problem reports during a specific time period	Number of external problem reports originating from a particular version
Open Days and External Problem Reports	Measures the average number of days external problem reports have remained unresolved from creation to resolution	*Date of resolved problem reports - Date of problem reports created*
Code Lines per User Story		*Code Lines / User Story*
Number of Files per User Story		*Number of Files / User Story*
Code Lines for Refactoring		Quantity of code lines for refactoring
Number of Developers per Resource		*Number of Developers / Feature*
Unit Test Coverage per User Story		*Unit Test Coverage / User Story*
Unit Test Success per User Story		*Unit Test Pass Rate / User Story*
Number of Defects per User Story		*Number of Defects / User Story*
Change Failure Rate	Measures flow efficiency	Percentage of changes requiring remediation after going into production
Time to Restore Service	Flow time metric	Amount of wait time for service restoration
Test Pass Rate	Measures trends in approval rate for automated test suites	Percentage of approval rate for automated test suite
In-Flow Defect Rate to Out-Flow Defect Rate	Determines if the team can fix more bugs than just those discovered during testing	*In-Flow Defects / Out-Flow Defects*
Defect Rate		*Number of Defects / 100*
Service Downtime		Amount of time a particular service has been down
Technical Debt	Indicator of poor decisions made regarding requirements, design and code	Can be constructed in two ways: (i) Tool-based approaches that include ERA *(Virtusa internal code scan tool) Cast AIP, SonarQube, Sonarj, Structure101,* and others; (ii) Self-reporting on technical debt outcomes, in which, when the project is not using a tool or certain categories of technical debt are not measured through tools, the team should discuss and select a set of the most painful technical debt outcomes and begin tracking them as part of their retrospective meetings