

Square

Augmented Analytics for Efficient Project Monitoring

What is Square?

Square is an efficient data intelligence platform that enables quality management of project development by:

- > Improving project performance
- > Driving Software and Systems Quality
- > Ensuring process and standard compliance

Why Use Square?

- > **To streamline** monitoring and review processes, based on full traceability and industry proven indicators.
- > **To share** real time engineering data within a Business Intelligence framework.
- > **To assess** standard compliance using Square Source Code Analyzer and external data sources.
- > **To automate quality** checking and reporting, helping development teams benefit from agile/DevOps processes.
- > **To compare** projects from a portfolio, allowing effective action-taking.

Key Features

> Aggregated Project Data

By harmonizing data from multiple repositories and tools, Square brings a tool-independent navigation system through the project hierarchy, traceability, and history.

> Focused Analysis

Square rating indicators exploration can be tailored to fit a given role orientation (quality, development, process, etc) or a specific analysis activity (coverage, compliance, review, etc).

> Project Monitoring Assistance

Based on its complete rating model results, Square provides outlier detection, quality objectives checking, trend analysis and one click report generation.

Return on Investment (ROI)

- > **Simplify assessment** with real-time monitoring.
- > **Increased confidence** on deliveries with aggregated quality checks.
- > **Improve reliability** via early defect detection.
- > **Speed up action-taking** based on objective indicators.
- > **Broadcast best practices** and enhance process maturity.
- > **Enhance collaboration** within teams with a centralized solution.
- > **Reduce cost** of code review.
- > **Lower maintenance load** via control of technical debt.

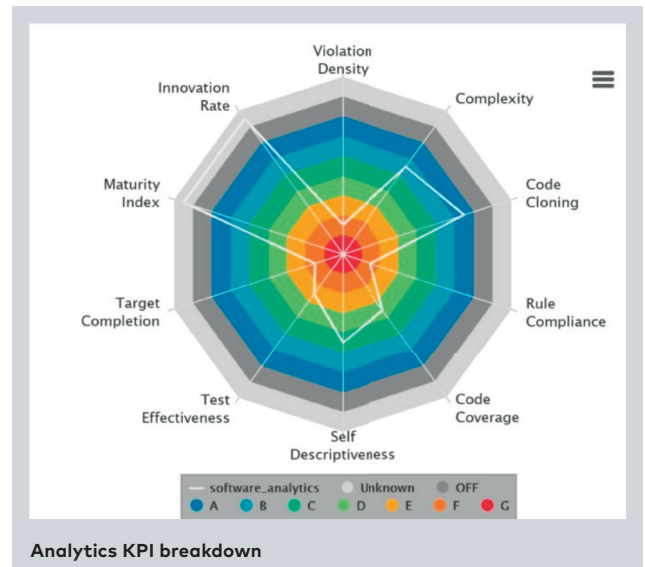


Application Areas

- > **Project Management:** Efficient quality highlights of a project based on specifications (requirements lifecycle and coverage), coding (style, complexity, documentation), tests (effectiveness, stability) and tickets (maturity index, innovation rate)
- > **Test:** Optimization of test activities by focusing on critical components according to test strategy
- > **Audit:** Template-based report generation
- > **Development:** CI-compliant automated quality checking (including delta versioning analysis, standard compliance, etc.)

Squire in a Development Process

- > **Integration of third-party data**
Squire integrates results from source code, tests, tickets, design, requirements, etc.
- > **Industry standards compliance**
Squire gathers essential indicators to monitor industrial software projects based on most common standards.
- > **Data exploration**
Squire data historization allows trend analysis and version comparison, following the project's development timeline.
- > **Continuous Integration**
Squire enhances continuous integration pipelines to provide up to date quality assessment, checks, and reports.



Squire Connectivity

- Squire engineering platform provides:
- > Ready-made interfaces to Vector tools: VectorCAST, PC-lint Plus, CANoe, vTESTstudio, Vector Connection Utility, etc.
 - > A toolbox of interfaces to third-party tools: Cobertura, Klocwork, CheckStyle, JaCoCo, QAC, PC-lint, FindBugs, StyleCop, Jira, etc.
 - > An API to extend data source from third party: CSV, Excel, JSON, XML, Vector Trace Items, Database, REST API, etc.
 - > Embedded source code analyzers for several languages: C, C++, C#, Ada, Java, Python, etc.

More information: www.vector.com/squire

