![Persistent logo]

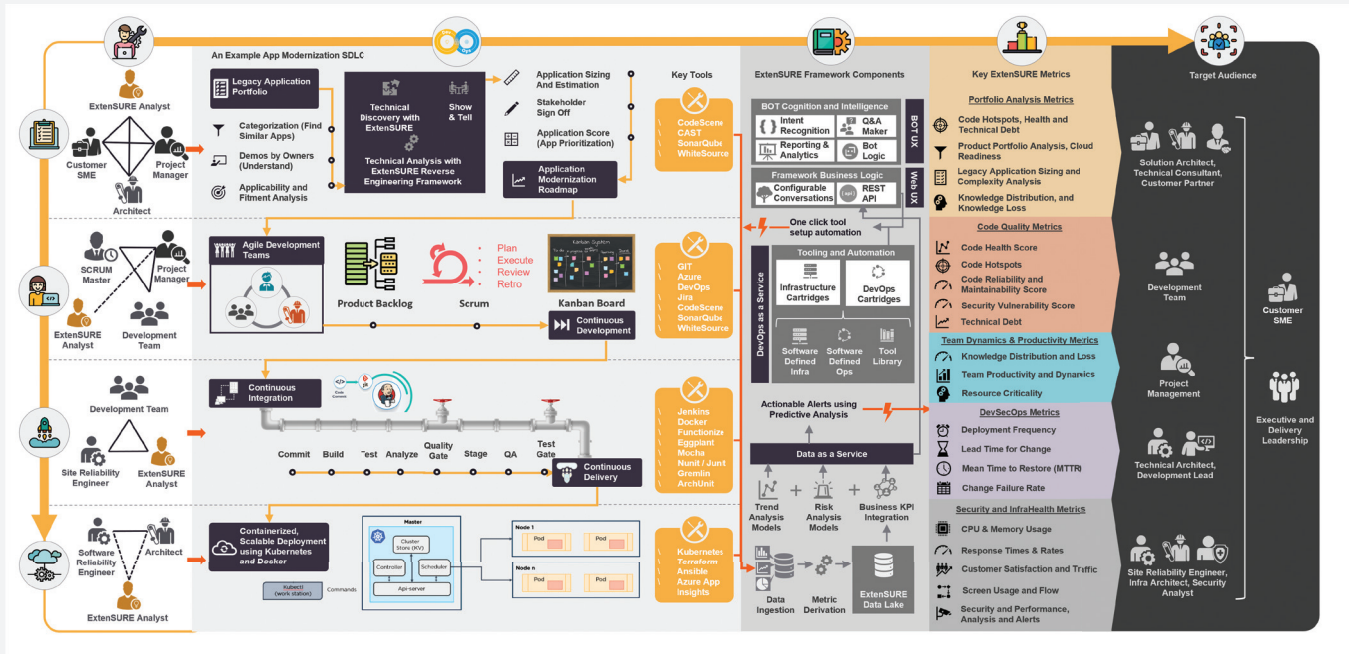# Tech Due-Diligence and Product Assessments

ExtenSURE, Persistent's Modern Product Engineering Platform, offers a broad range of technical analysis, consulting and engineering capabilities across all phases of the software development lifecycle. ExtenSURE's platform engineering approach places a strong emphasis on framework-led, tools-driven, technical due-diligence and product assessments.

ExtenSURE begins with an in-depth analysis of the product codebase using automated technical analysis tools. This analysis covers behavioral code insights, hotspot analysis, product architecture, reverse engineering design blueprints, complexity, maintainability, reliability, security, cloud readiness, critical resource dependencies, resource offboarding simulations, and a host of other dimensions.

ExtenSURE can also rapidly analyze an entire portfolio of applications for Cloud Readiness Assessment. It offers a systematic, framework-led, data-driven approach for translating the enterprise cloud adoption vision into a step-by-step implementation roadmap, using ExtenSURE analysis of the portfolio as the starting point.

ExtenSURE follows a data-driven approach to digital transformation — providing companies with the actionable insights they require to successfully undertake large, complex initiatives without disrupting their ongoing engineering or business rhythm.
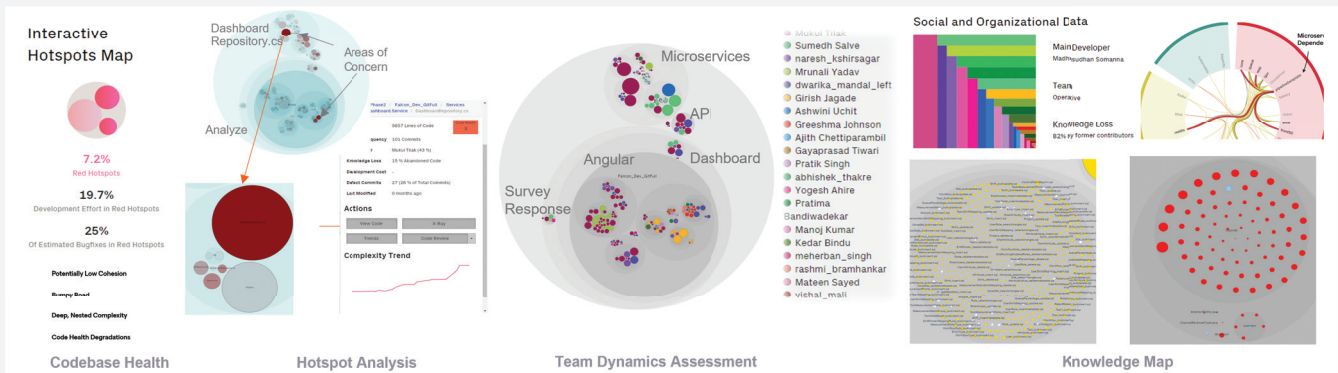
ExtenSURE — Overall Architecture and Capabilities

Product Health Analysis, Technical Debt Management and Team Dynamics Assessment

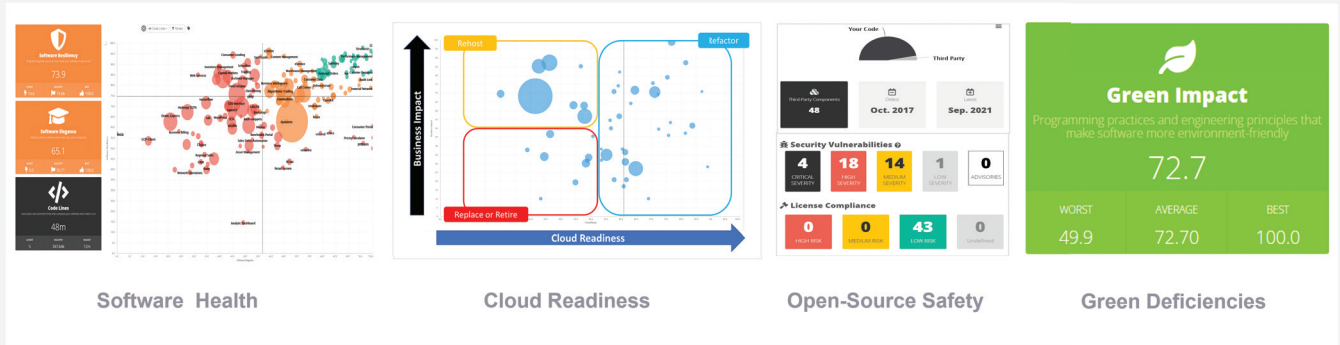|				
Activities	Static codebase analysis to improve code health and manage technical debt	Fully transparent trend analysis and reporting	Inside view of engineering team dynamics	Detailed knowledge map to build efficient teams
Outcomes	Code health score and trends (Repository, Files, Functions), Hotspots identification, recommendations to fix / refactor	Automated code reviews, improvement recommendations, refactoring targets, technical debt prioritization and pull request statistics	Code contribution, developer spread, resource dependencies,	Key personnel analysis, knowledge distribution, developer on and off-boarding simulations

Representative Outcomes

Codebase Health　　　Hotspot Analysis　　　Team Dynamics Assessment　　　Knowledge Map

Cloud Readiness Assessment and Prioritization for Portfolio of Apps

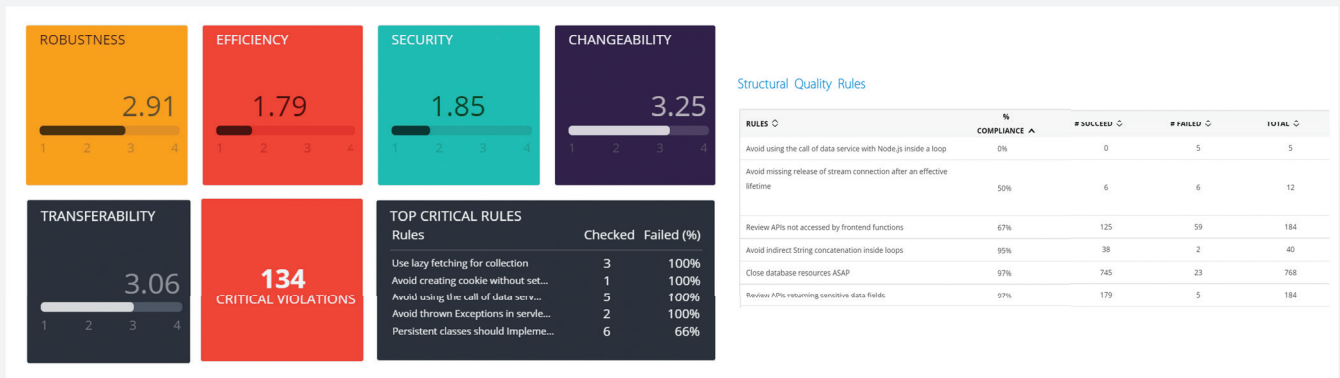| Activities	Technology Due Diligence	Assessing Cloud Readiness	Generate SBOM and Perform Software Composition Analysis	Green Impact Assessment
Outcomes	Overall health of application portfolio using objective software health metrics including Resiliency (reliability), Agility (maintainability), and Elegance (complexity)	Segment and prioritize apps across the entire portfolio based on Cloud Readiness and Business Impact. Deeper understanding on cloud boosters, roadblocks and cloud services recommendations	Detect 3rd party components in use, create detailed SBOM and license risk profile with security vulnerabilities and obsolescence risks	Identify opportunities to improve sustainability and Green Impact of applications when planning your sustainability initiative

Representative Outcomes

Software Health	Cloud Readiness	Open-Source Safety	Green Deficiencies

Detailed Code Health Structural Assessment

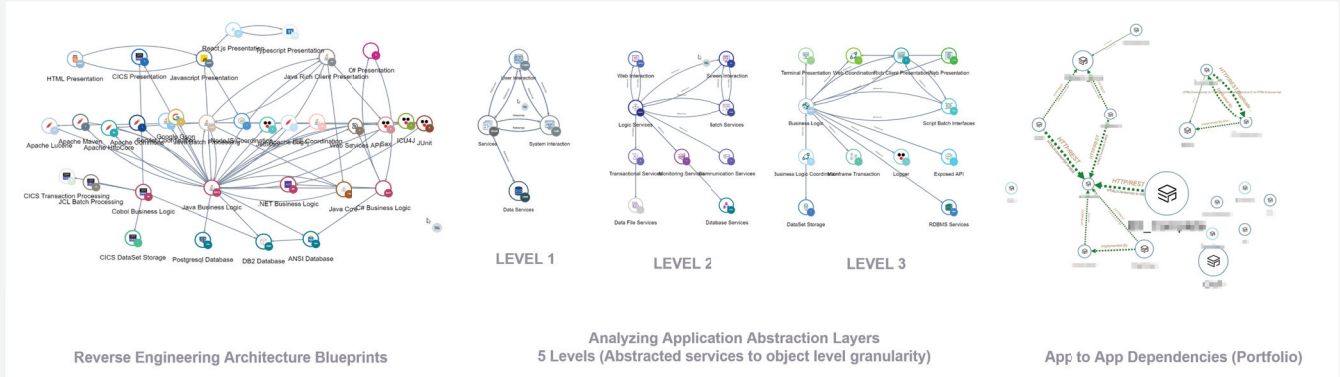| Activities	Code Quality basis impact on application operations and development activity	Prioritize violations	Structural Quality Issues
Outcomes	Findings in terms of Robustness, Efficiency, Security, Changeability, Transferability,	Critical violations segregation, split into different technical criteria (Architecture, Efficient, Secure Coding etc.)	Component level, line level details available for action planning and tracking

Representative Outcome

Reverse Engineering Architecture and Design Blueprints

Activities	Reverse-engineer architecture blueprints, design & process flows	Inventory of all technology components	Data access graph	Visualize Inter-App Dependencies
Outcomes	Actionable insights for application transformation planning & prioritization	Inventory and export all the languages, frameworks, libraries, and databases used in the application	Identify and map pathways of all the components that are involved in processing or using a data entity	Identify the type of dependencies between applications and investigate the impact of breaking off the linkages

Representative Outcomes

LEVEL 1   LEVEL 2   LEVEL 3

Reverse Engineering Architecture Blueprints

Analyzing Application Abstraction Layers
5 Levels (Abstracted services to object level granularity)

App to App Dependencies (Portfolio)

About Persistent

With over 23,000 employees located in 21 countries, Persistent Systems (BSE & NSE: PERSISTENT) is a global services and solutions company delivering Digital Engineering and Enterprise Modernization. We work with the industry leaders including 14 of the 30 most innovative companies as identified by BCG, 8 of the top 10 largest banks in the US and India, and numerous innovators across the healthcare and software ecosystems. As a participant of the United Nations Global Compact, Persistent is committed to aligning strategies and operations with universal principles on human rights, labour, environment, and anti-corruption, as well as take actions that advance societal goals.

USA
Persistent Systems, Inc.
2055 Laurelwood Road, Suite 210
Santa Clara, CA 95054
Tel: +1 (408) 216 7010
Fax: +1 (408) 451 9177
Email: info@persistent.com

India
Persistent Systems Limited
Bhageerath, 402
Senapati Bapat Road
Pune 411016
Tel: +91 (20) 6703 0000
Fax: +91 (20) 6703 0008

Persistent

www.persistent.com