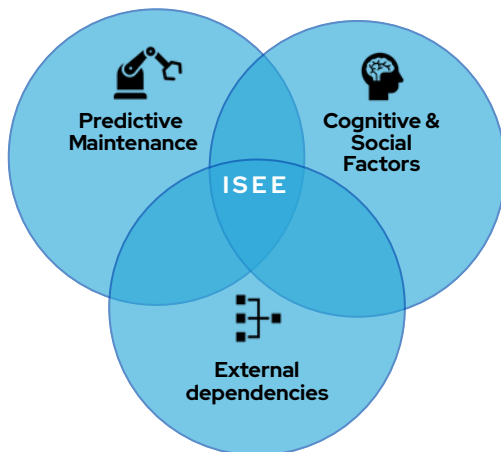


Integrated Software Ecosystem Evaluation (I-SEE)

Understanding the software ecosystem • Identifying risks • Securing the future



What is I-SEE?

I-SEE analyzes software ecosystems as they evolve: code ages, teams change, dependencies develop. Using comprehensive metrics and machine learning, I-SEE evaluates these dynamics technically, socially, and strategically to proactively manage quality and risks.

- **Predictive Maintenance:** AI-supported pattern recognition of code, team, and change metrics identifies maintenance-intensive areas at an early stage
- **Cognitive & Social Factors:** Analysis of code comprehensibility, team knowledge, and knowledge distribution
- **External dependencies:** Management and risk assessment of dependencies and their relevance

Risk landscape at a glance



Interactive visualizations identify high-risk code areas and enable data-driven test focus decisions. Color coding from non-risky (blue) to high-risk (red) shows at a glance where action is needed and which files require special attention.

Holistic framework

Analysis at levels of code comprehensibility, maintainability, team knowledge, evolutionary development, and dependency management

Time-based evolution

Evaluation of code development over time through commit analysis and historical trends

ROI & risk minimization

Early error detection and optimized testing resources reduce maintenance costs and business risks

Added value for your organization

 **Developers:** Early feedback on risky code changes

 **QA & testing:** Prioritization of testing strategies based on identified high-risk areas

 **Engineering leads:** Insights into workload distribution and knowledge risks

 **Management & Compliance:** Due diligence, audit support, and risk assessment



Theodor Hartmann
Product Manager

 +4366488720575

 theodor.hartmann@objentis.com



Alexander Schatten
Senior Researcher at SBA Research

 +436802078226

 aschatten@sba-research.org