CAST
Software Intelligence for Digital Leaders

KNOWSYS™
Substance Relevance Results

The MRI for Software

Software Intelligence at your fingertips

Discover - Decide – Communicate - Measure - Protect - Improve

What is Software Intelligence?

Software Intelligence is insight into complex software structure.
It consists of…

Software Health

Robustness, Efficiency, Security, Changeability, Transferability, Complexity, Cloud Readiness

Software Size

Functional and Technical sizing to assess quantity of work

Software Flaws

That create potential outages, security breaches, and data corruption

Software Blueprints

Map and visualize software structure and architecture

Software Benchmarks

Accurate, consistent analytics by industry and geo, normalized by functional size, based on structural data from thousands of software systems.

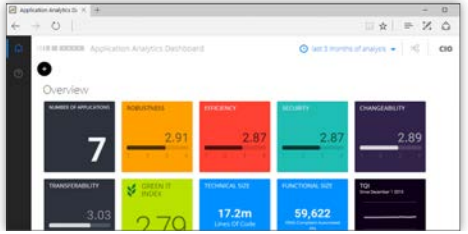
Products & Services

CAST APPLICATION INTELLIGENCE PLATFORM

CAST Highlight

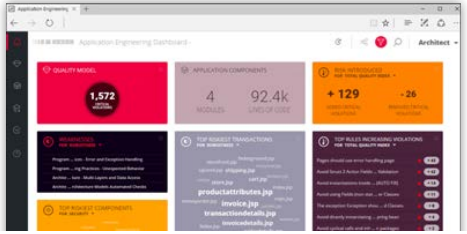
- Portfolio health measures
- Potential risk
- Savings opportunities
- Cloud-ready assessment
- Industry benchmarks

Health Dashboard



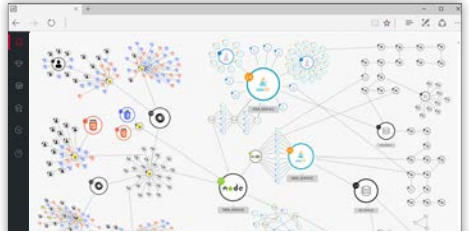
- Software health measures
- Trend analysis
- Flaws and technical debt
- Software sizing
- Application security

Engineering Dashboard



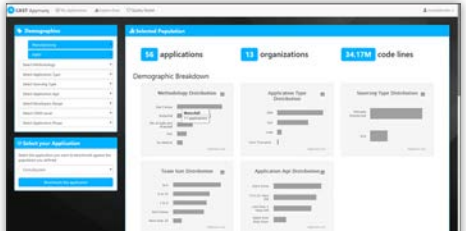
- Software flaw identification
- Security and risk identification
- Architecture governance
- Engineering best practices
- Remediation planning

CAST Imaging



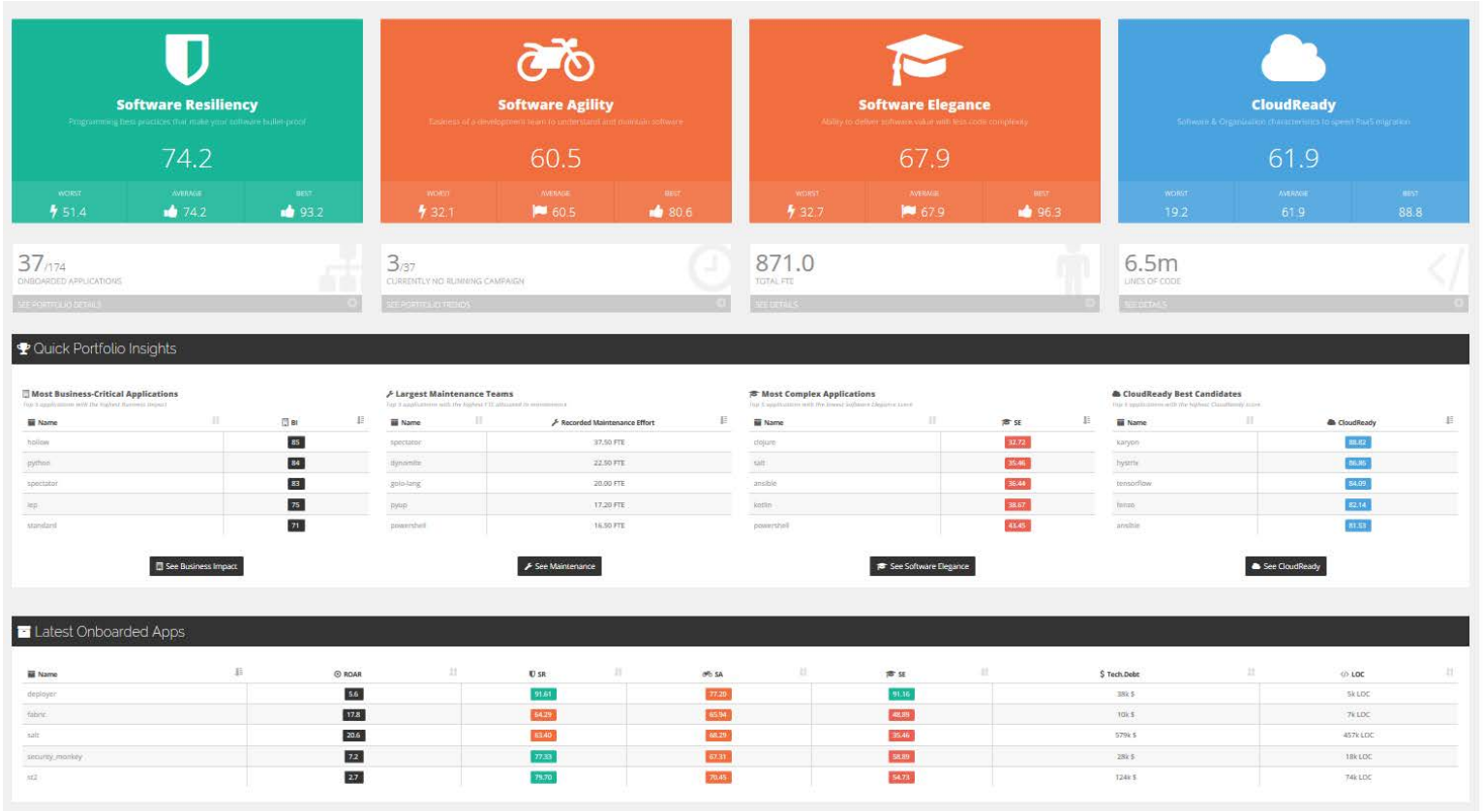
- Architecture analysis
- Blueprinting
- Impact analysis
- Application discovery

CAST Appmarq



- Industry, technology & geography benchmarks
- +2500 applications, +3B LOC
- Annual industry reports
- Custom benchmarking

Cloud Readiness – Baseline Objectively



- Turn Cloud Readiness assessment into a standard continuous process to optimize the migration of legacy applications over time
- Leverage fact-based metrics that provide an objective diagnostic on Health, Cost, Business Impact, Technical Debt as well as Cloud Readiness

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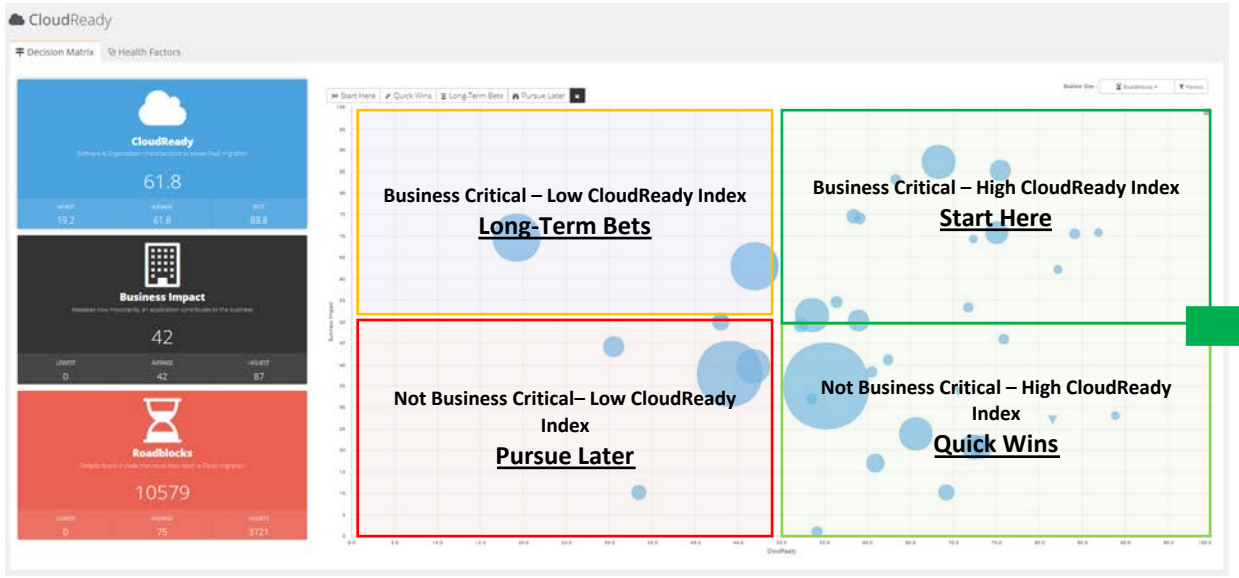
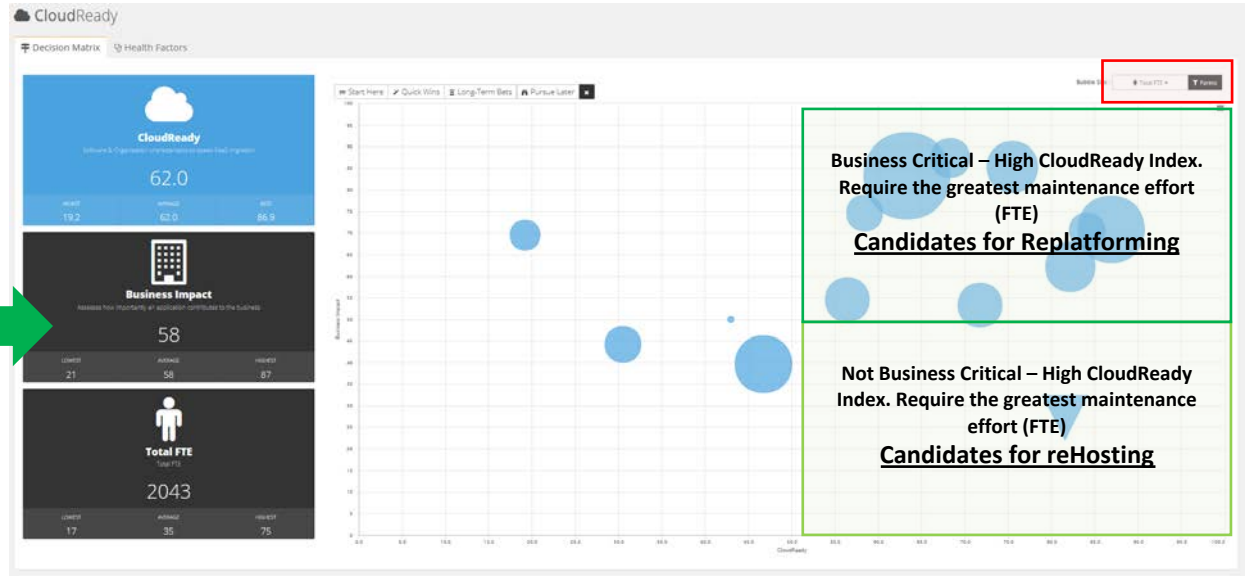
Cloud Readiness - Segment to Prioritize



Business Impact Vs Cloud Ready Index
Size: Roadblocks



Business Impact Vs Cloud Ready Index
Size: number of FTE + Pareto (top 20%)

- Create a baseline of the portfolio in a matter of days and identify the Cloud Readiness of the applications
- Leverage the cross-analysis abilities to define segments of apps to : re-host, re-platform, rewrite or replace
- Confirm the diagnostic by assessing the health of the selected applications to guarantee a seamless transition

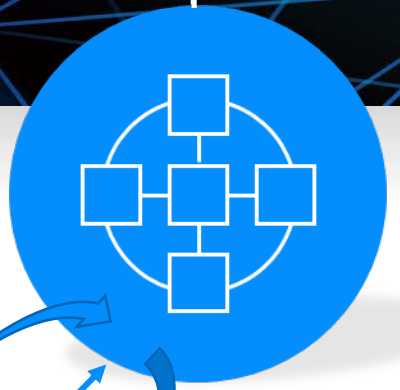
Common Modernization Lifecycle

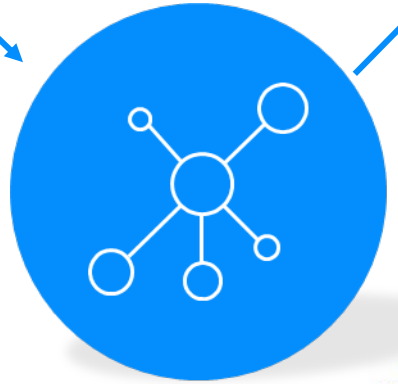
IT Modernization Journey

Legacy Application/System Assessment

TO-BE Architecture (Design)

Develop & Maintain (Trends/Progress)





AS-IS Architecture (Discovery)

Implementation (Engineering)

Assess the State of the Applications

- Scope and size the first set of applications to modernize
- Establish baseline in order to show modernization progress and ROI
- Identify biggest risks
- Establish the boundary of the modernization effort
  - What's in and what's out?

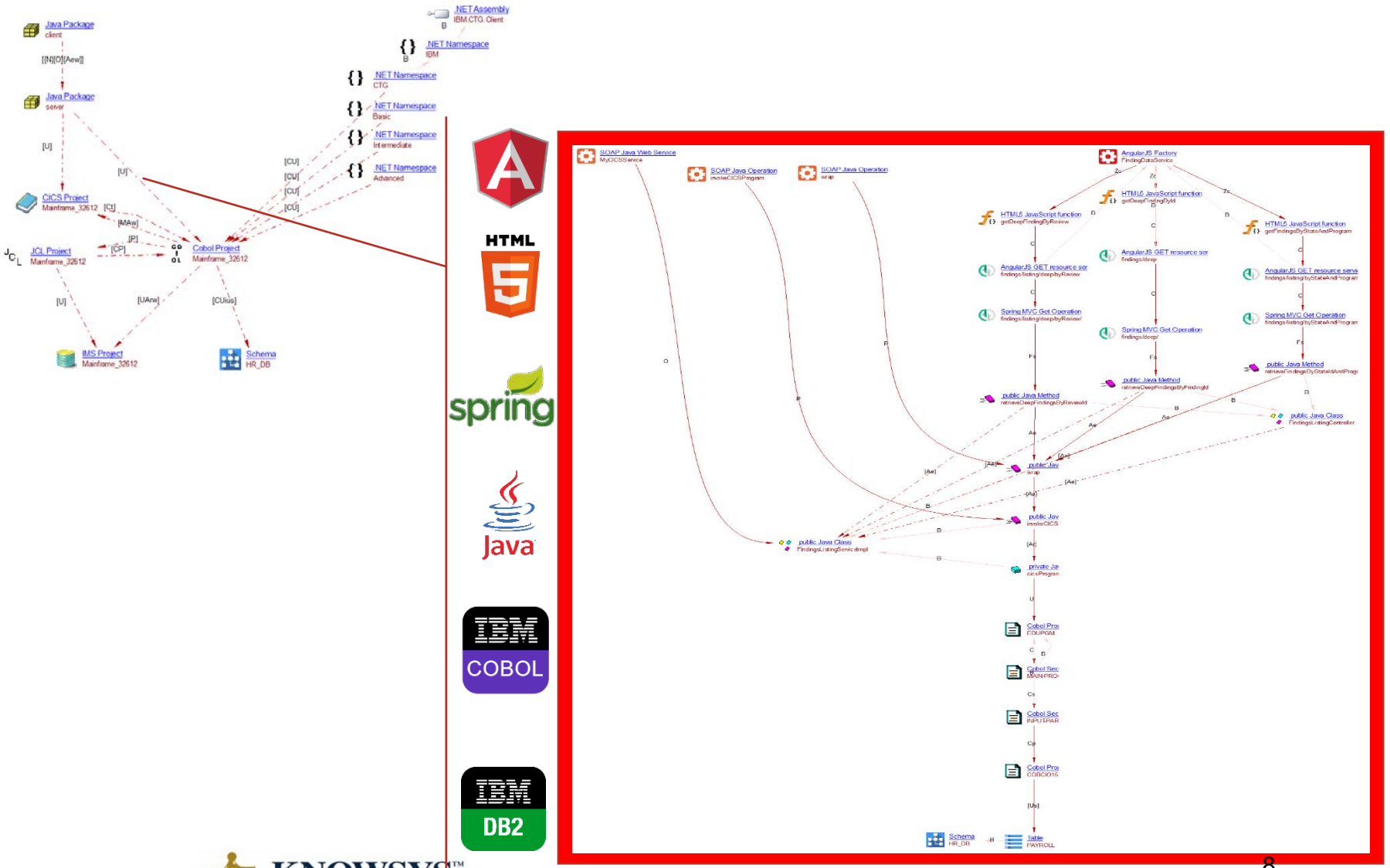
Quality

Size

Complexity

As-Is Architecture: MRI of the Application

- Map out components/ dependencies based on calls in the code
- See the complexity/ dependencies BEFORE you begin
- Plan, budget and allocate resources appropriately
- Mitigate or avoid unexpected overruns due to unknown dependencies surfaced as “Unspecified Requirements”



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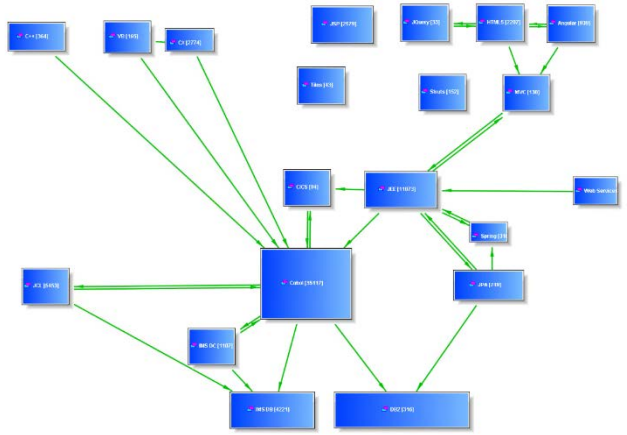
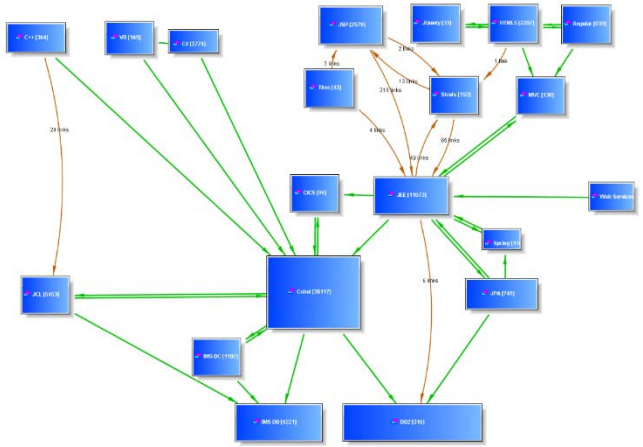
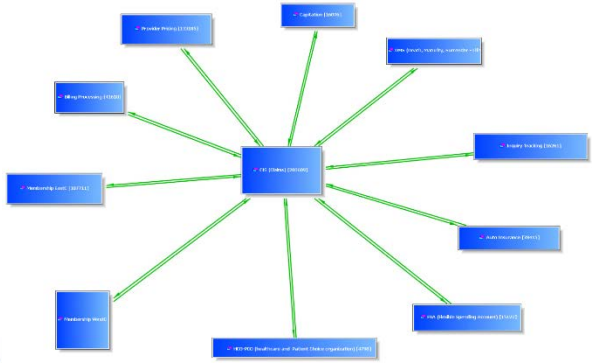
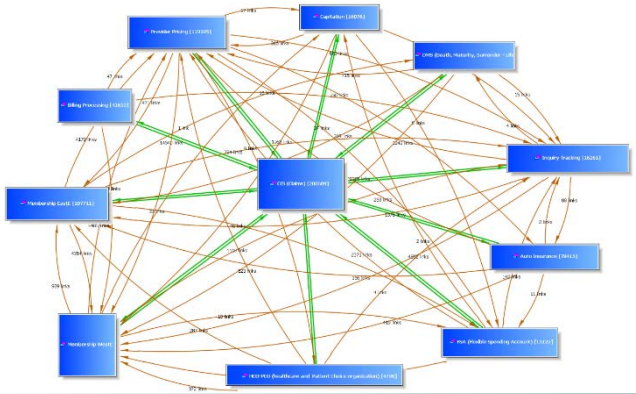
To-Be Architecture: Design

- Validate To-Be Architecture Design w/ architecture rules
- Identify gaps and violations in the system
- Generate an action plan from system violations discovered
- Validate Target Architecture
- Test designs
- Guide development work

	To Be Architecture	Identify gap between Current and To Be State
Technical Layering		
Functional Layering		

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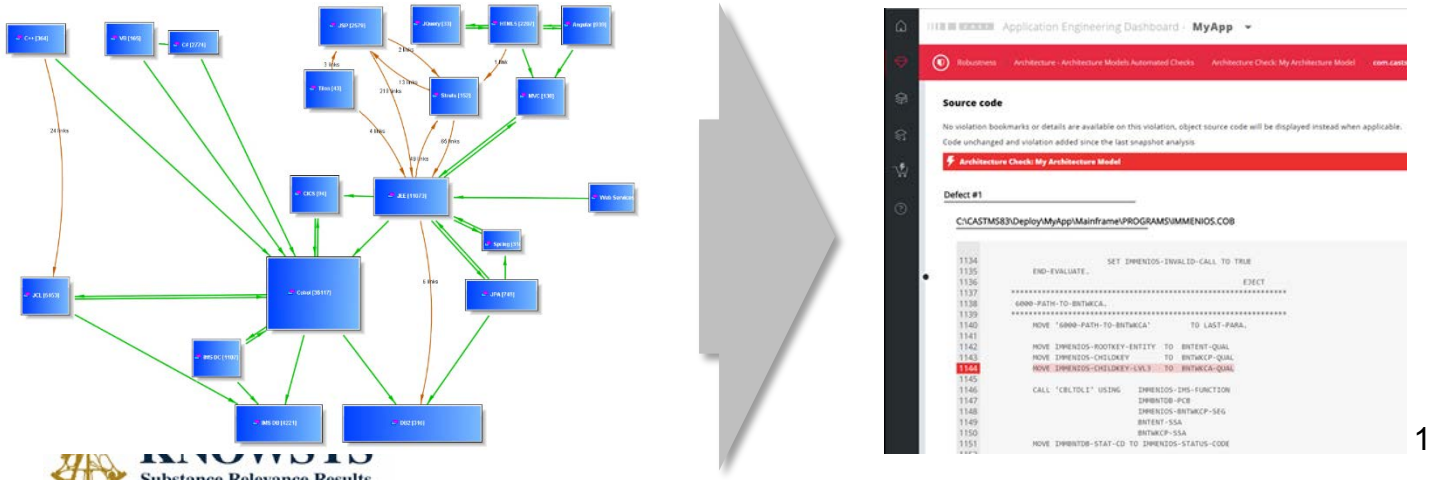
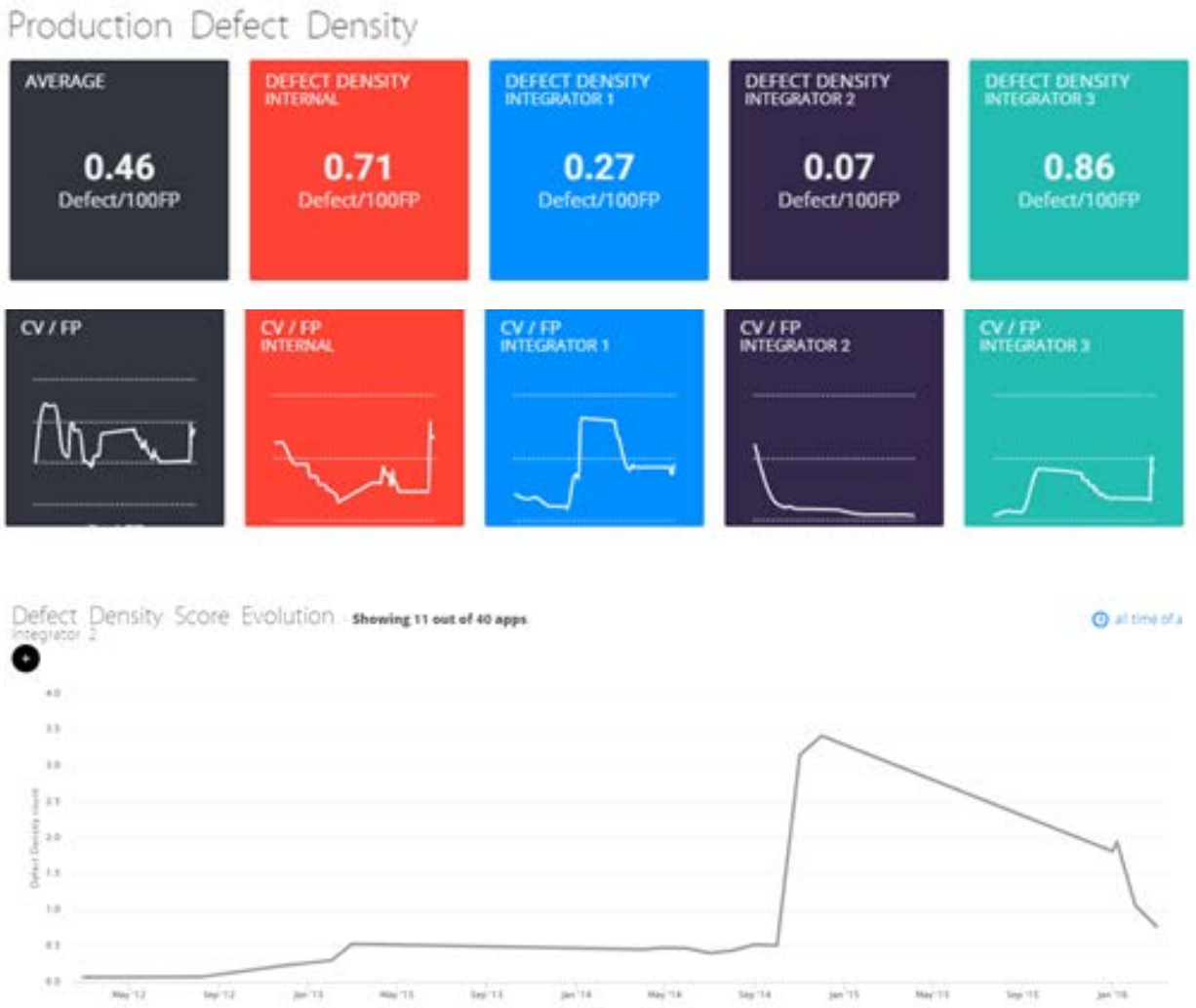
Guide Development Work

- Identify Violations, Risks and Weaknesses
  - In components
  - In transactions
- Prioritize work based on risk impact
- Facilitate work by drilling straight into code that contains issues
- Seamlessly report progress to management



Track Progress Over Time

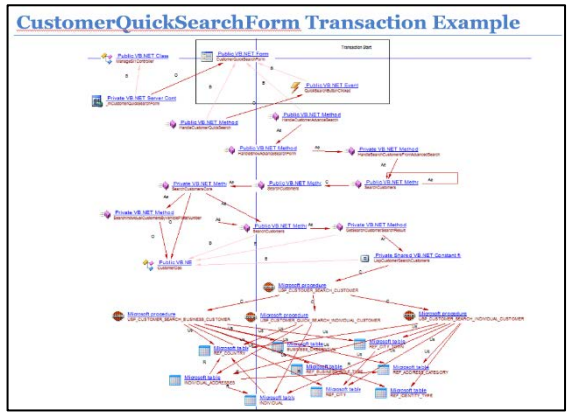
- Track Project Level KPIs
  - Defects
  - Violations
  - Functions
- See current levels at a glance
- View Trends, Progress over Time
- Report and Project ROI based on factual data

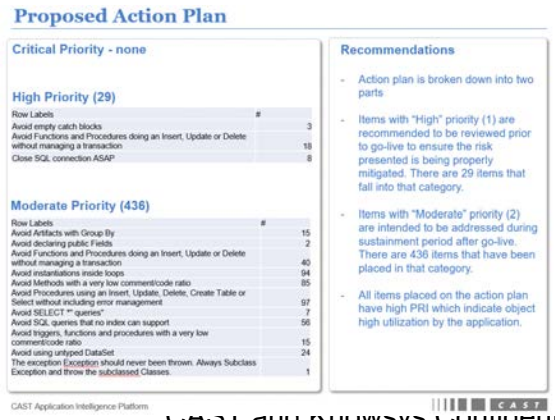


State Use Cases: Software Intelligence Applied

Rhode Island DMV

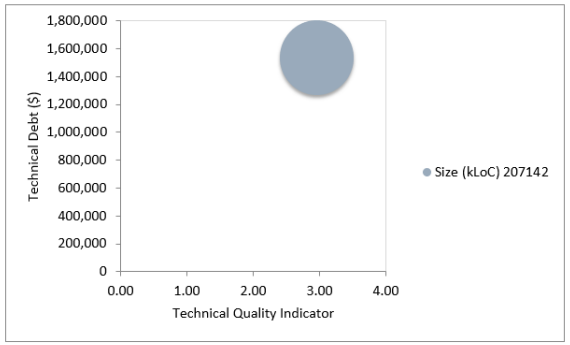
Customer facing app with history of outages and failures assessed and now running without issue





California MyCalPAYS

$250 million spent on upgrades for a 1500 state employee system plagued by glitches and outages. Provided standards based independent assessment for quality and potential reuse of vendor supplied ABAP code used in support of negotiation and litigation.



THE SACRAMENTO BEE

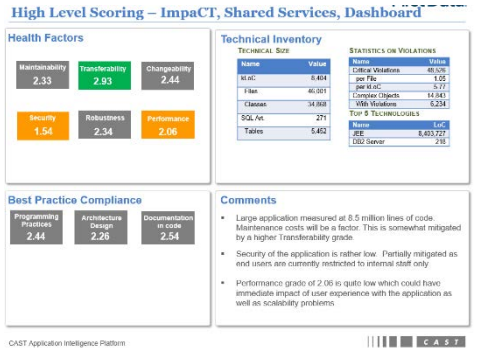
BY JON ORTIZ
JORTIZ@SACBEE.COM

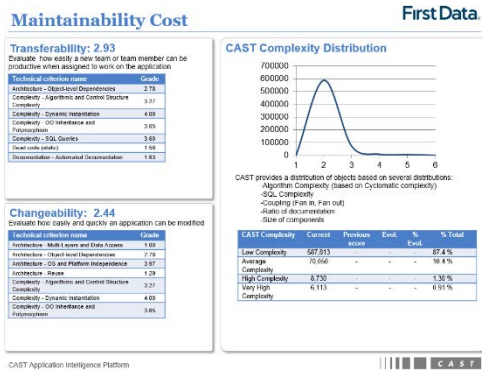
June 06, 2016 06:15 PM
Updated June 07, 2016 06:30 PM

A long fight between the California State Controller's Office and a technology company over a failed payroll system upgrade ended Monday with a settlement, refunding $59 million to the government.

Connecticut ImpaCT

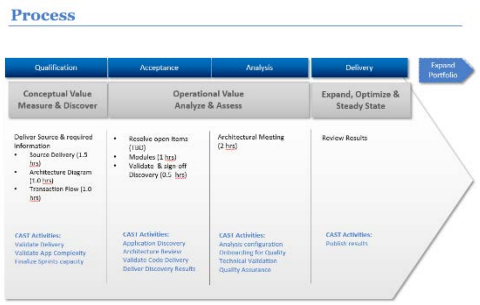
Customized citizen eligibility portal software that was difficult and expensive to maintain. Reduced technical debt through analysis and remediation





Pennsylvania HHS

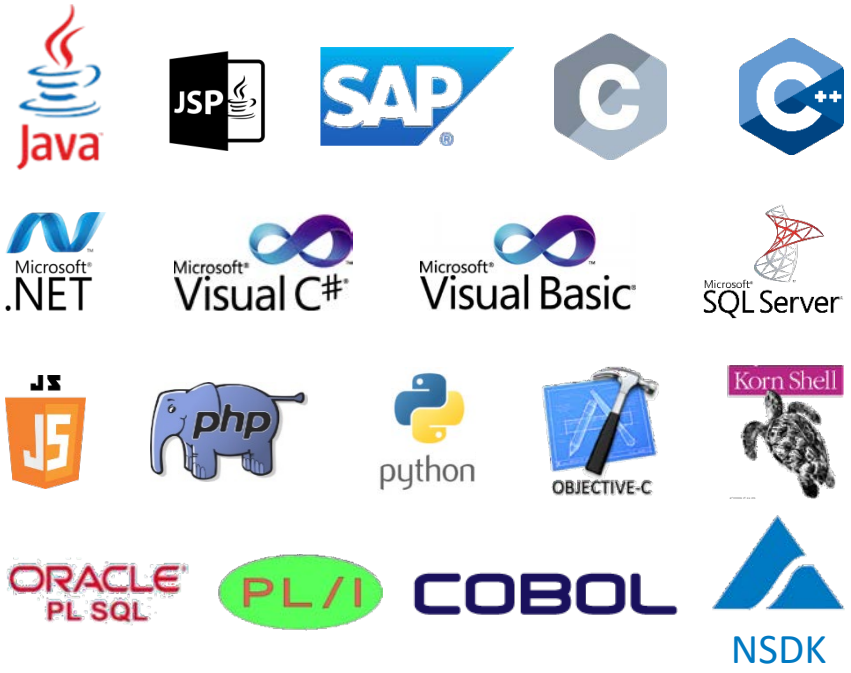
Consolidation efforts to centralize QA and IV&V for state. Needed a way to standardize across portfolios, measuring vendor and in-house developed software.



CAST Technology Coverage

CAST

CAST Highlight can analyze 20+ different technologies



CAST AIP supports 50+ different technologies, 11+ databases