

Imagine a world where technical debt, project failures, and hidden edge cases are caught before they impact your business.



This isn't science fiction—it's reality

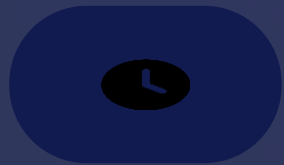
Requs AI Revolution

Mission Ready Software

The Problem We Solve

Development Crisis

Software projects fail at alarming rates. Technical debt accumulates silently. Edge cases emerge at the worst possible moments. Teams react to problems instead of preventing them, costing billions in delays and failures.



Late Discovery

Critical issues surface during late stages when fixes are exponentially more expensive and time-consuming.



Reactive Development

Teams discover problems after they've already caused damage, leading to costly fixes and project delays.

Introducing Requs AI

Proactive Solutions

Shift left without angst by
preventing issues at their source.

Predictive Intelligence

The only AI powered solution that
sees software problems *before* the
code is written

Revolutionary Accuracy

Five orders of magnitude more
accurate than traditional guessing
methods.



Requs AI Capabilities

Predict Technical Debt

Predict escapes and when they are likely to be discovered

Manage Iron Triangle

Interactively balance scope, budget, features and technical debt while identifying high-ROI practices and eliminating waste.

Predict RAM Metrics and error budgets

Predict SRE and RAM metrics without guessing.



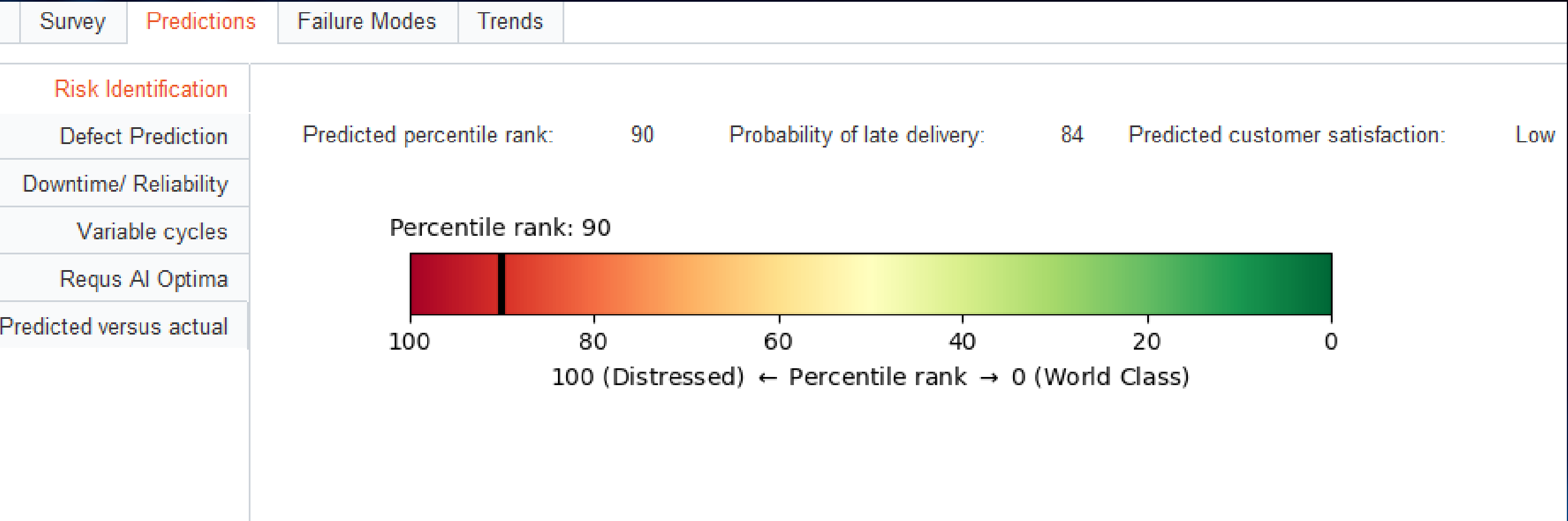
Assess Project Risk

Get insights on how to change trajectory before projects fail.

Predict Edge Cases/Failure Modes

Discover unknown failure scenarios and hidden edge cases before they make headlines or impact users.

Requs Ai Predict – Risk Identification



Risk avoidance

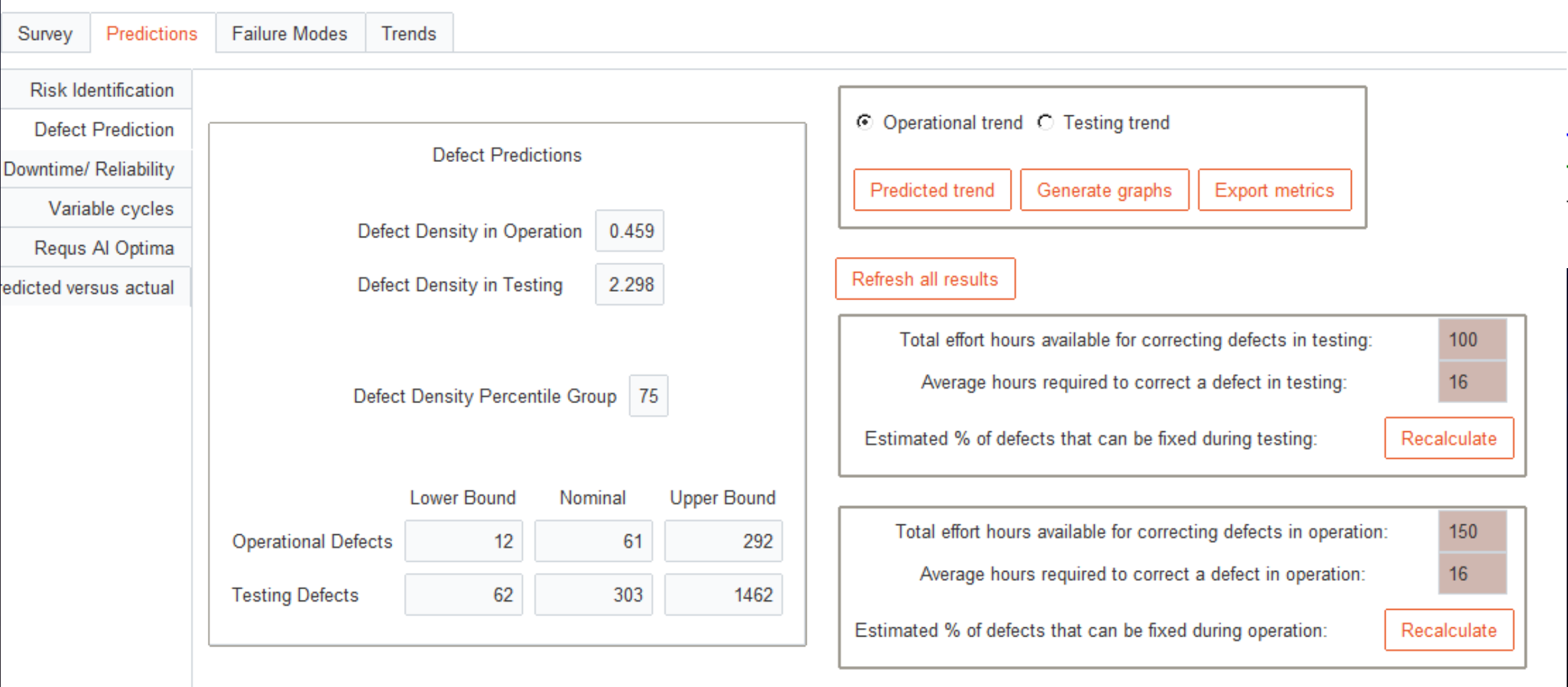
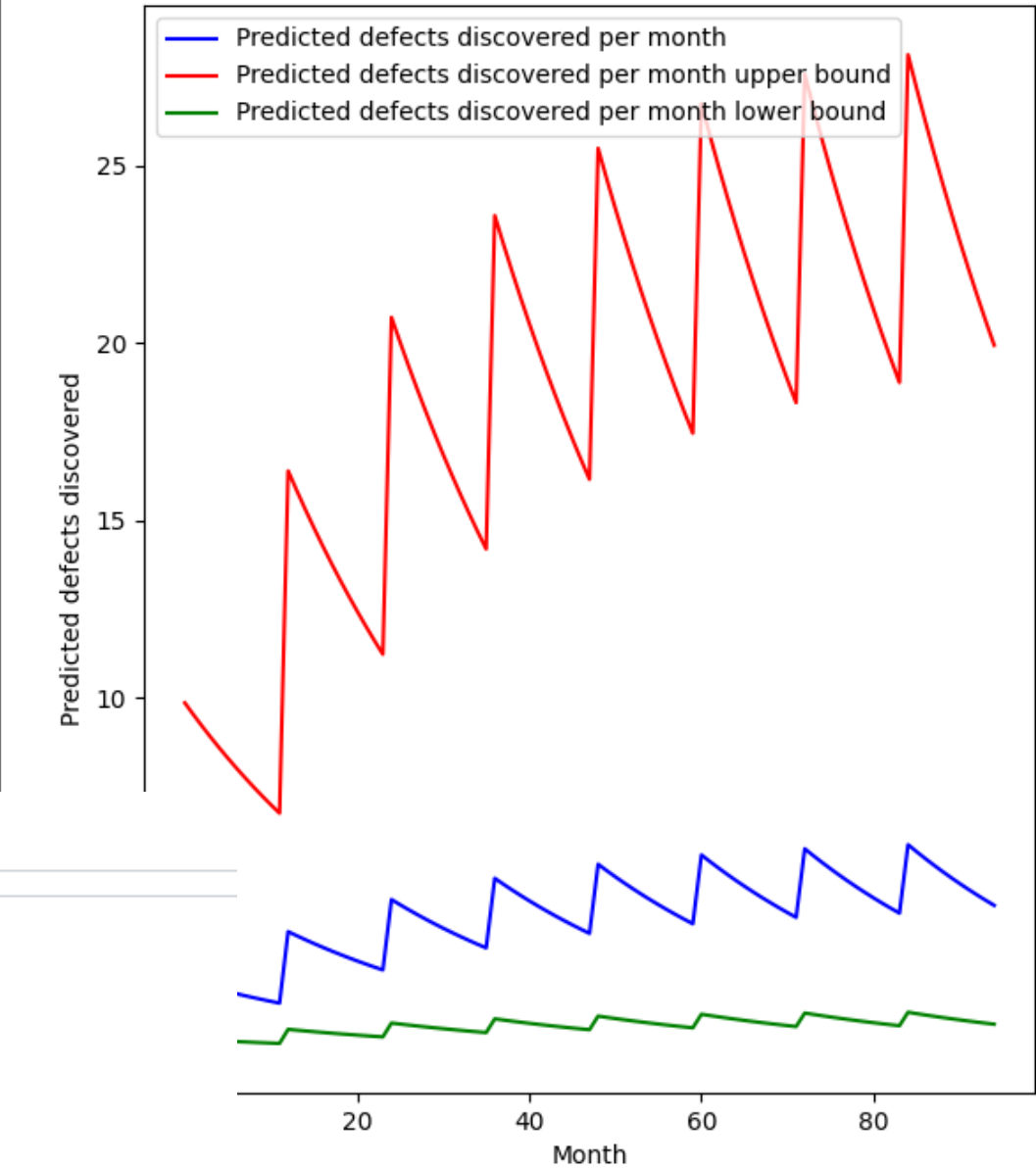
- Predict risk level from very low to very high
- Predict defect density percentile (3% world class to 97% distressed)
- Predict probability of late delivery
- Predict customer satisfaction
- Use ML model to identify the key gaps and strengths so you can mitigate the risk level



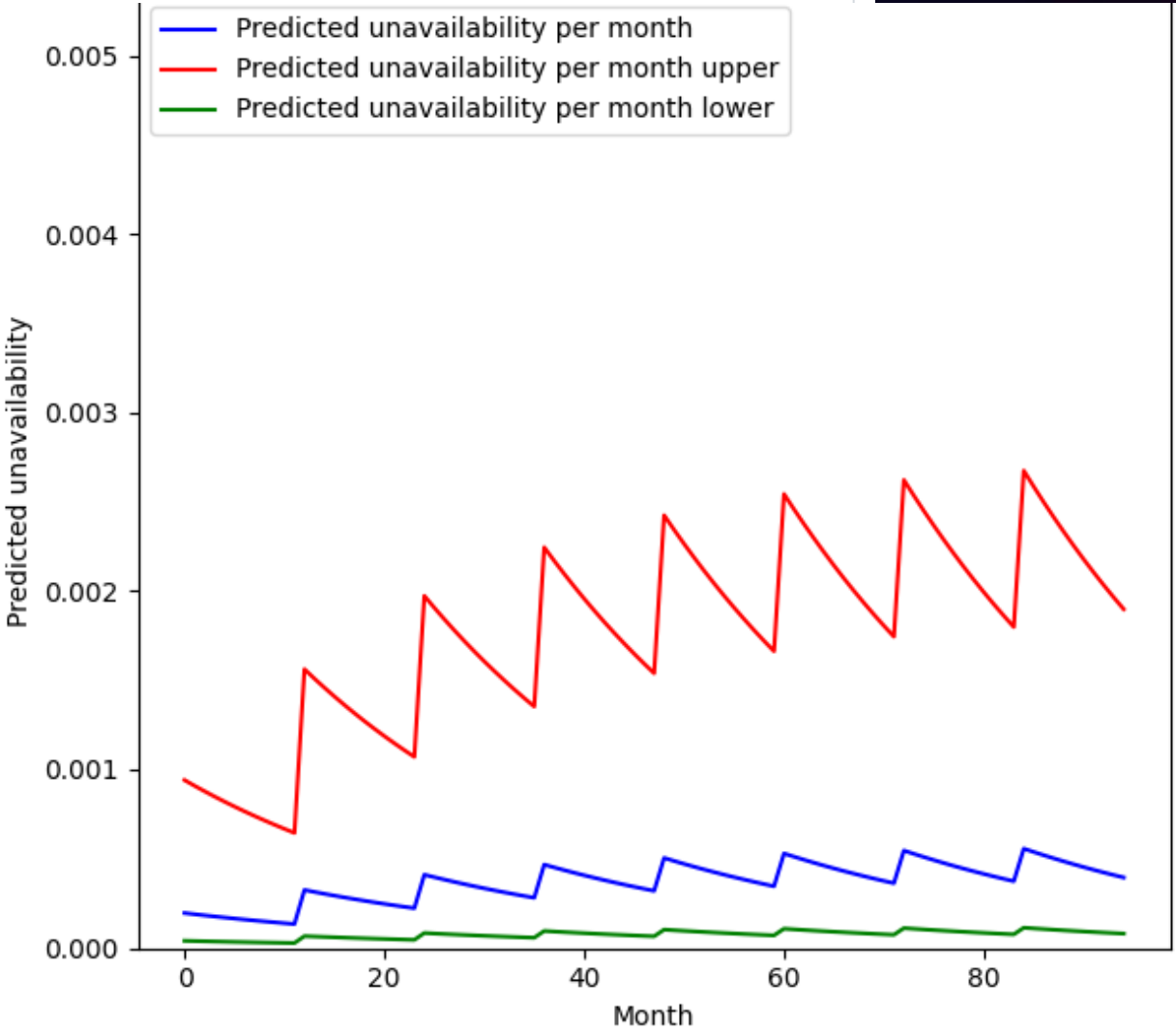
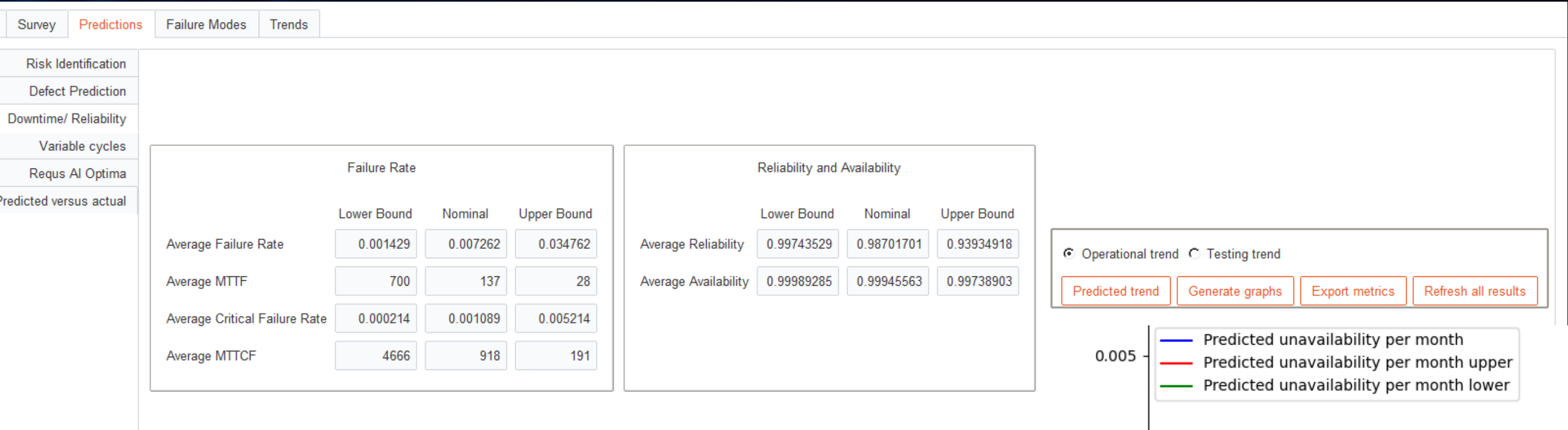
Requs AI Predict – Defect Prediction

Defect and pileup prediction

- Predicts defects and pileup before code is written
- Identifies bottlenecks early
- Enables true shift-left development practices



Requs Ai Predict – Downtime/Reliability



RAM Metrics and Error budgets

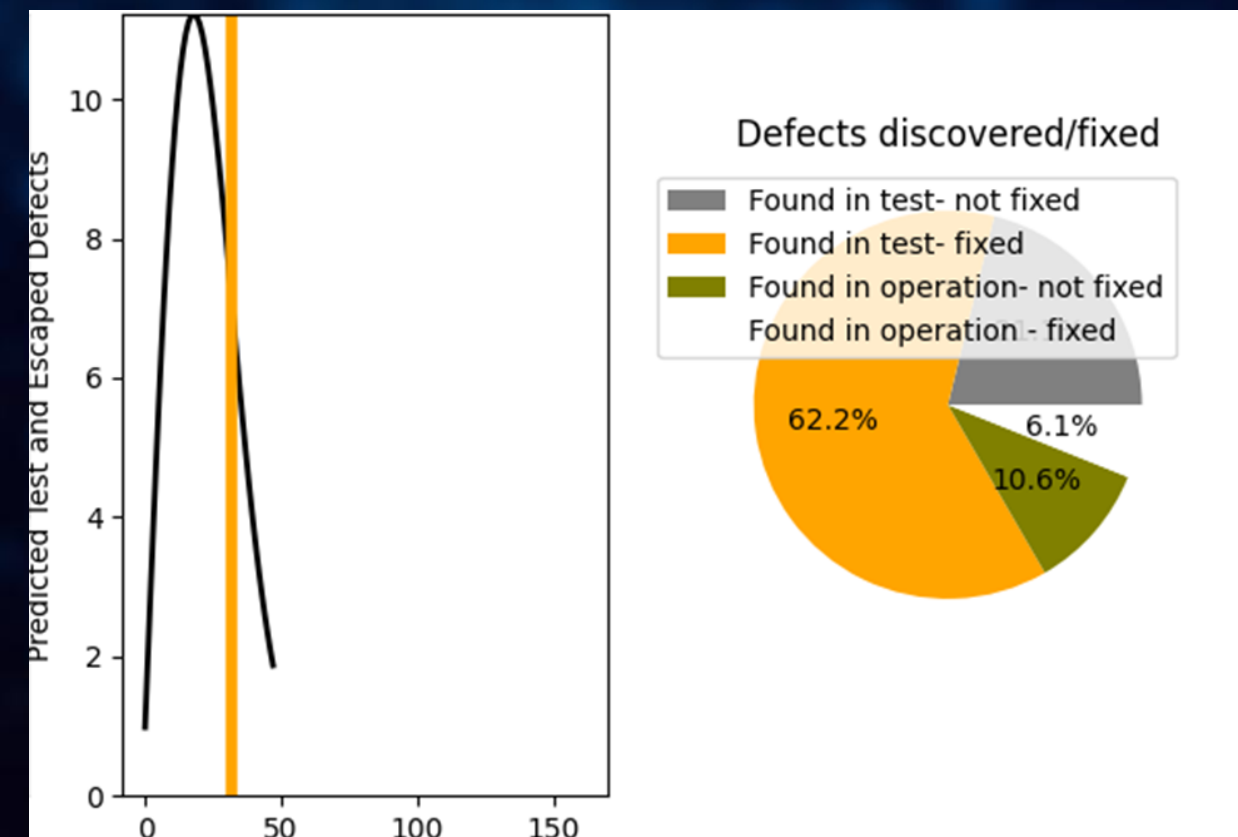
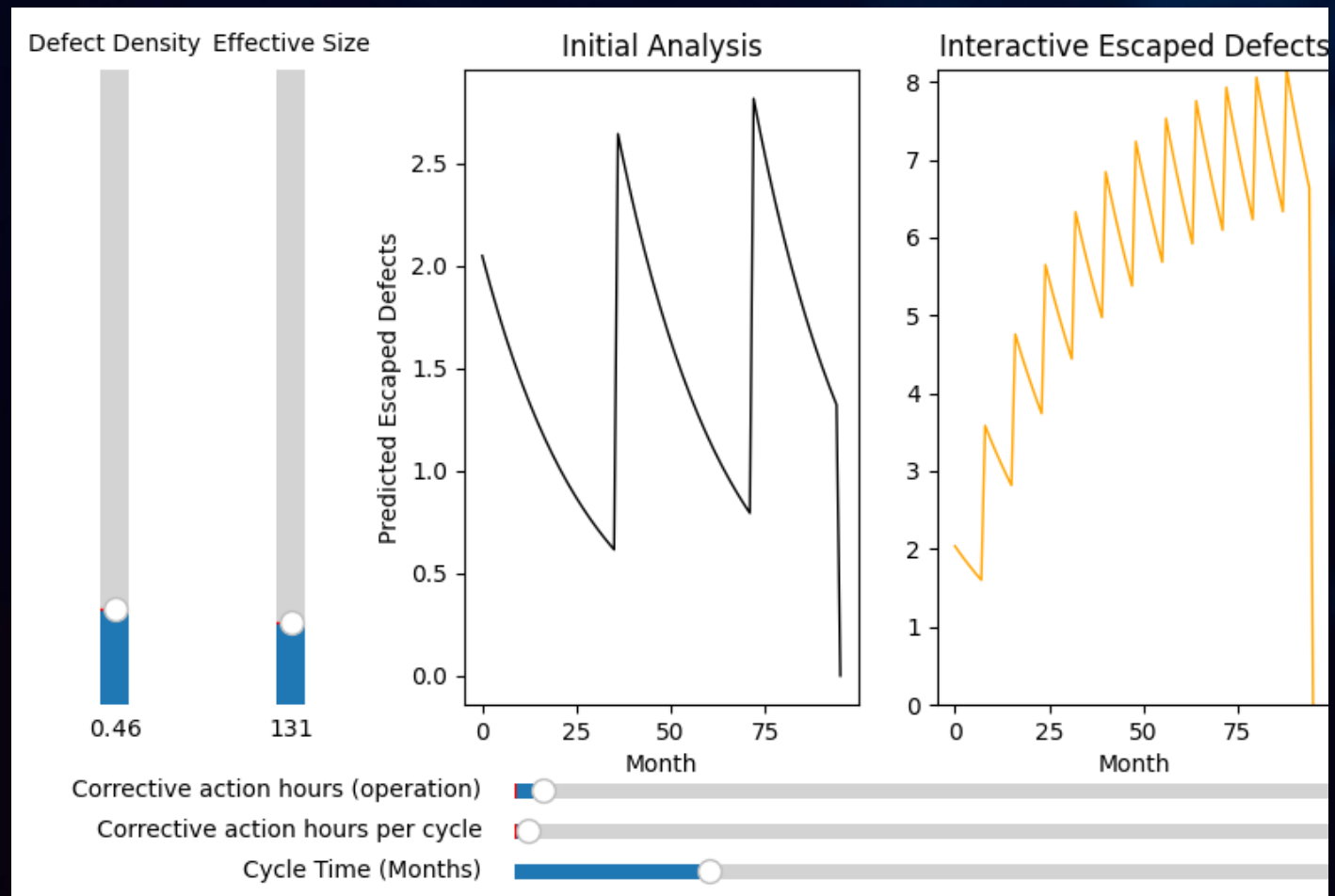
- Predict error budgets, reliability planning and enabling data-driven SRE decisions.
- Proven to be 5 orders of magnitude more accurate than guessing



Requs AI Optima

ROI Optimization

- Identify overkilled practices with low ROI
- Discover high-impact gaps, optimizing your development process for maximum efficiency.
- Interactively manage the iron triangle – scope/size, cycle time, reliability and test/fix effort



Requs AI Edge Case Prediction

Edge Case Discovery and Mitigation

- Find hidden edge cases before they find you
- Predicts relevant edge cases and how to fix and test each edge case
- Supports MBSE imports of state models, hardware sensors, software components and interfaces
- Focuses on 70% of edge cases that originate before coding



t	Survey	Predictions	Failure Modes	Trends			
Hazards and criticality		Next page		Previous page			
State Transition Table		CDE	Failure Mode	Applicable	Likelihood	Root Cause	Potential Corrective Actions
HW/Comm Interfaces							
Edge Cases		CL-A-1	Algorithm doesn't work for entire range of inputs	Yes	1.625	The algorithm hasn't been designed for all valid inputs or the code was not written to accommodate the entire range of inputs	Firstly identify the key mission critical algorithms. Secondly, identify mission critical algorithms that don't have any limitations for input ranges. For example, a submarine can traverse under the north-south pole and the navigational software must be written to accommodate that valid set of inputs. Verify that the software specifications clearly point out the valid ranges and that test procedures are developed to test the entire valid range.
Effects							
Likelihood							
Mitigation		CL-A-2	Algorithm overflows or underflows	Yes	1.8125	The algorithm inputs aren't being checked	Review the software specifications and design and verify that there are design requirements for mission critical algorithms to handle overflows and underflow. Review the software test procedure to verify tests are run to stress the algorithms to verify that overflows and underflows are handled. Track closure.
Residual risk							
Critical items list		CL-DD-1	Software assumes data is available when it may not be	Yes	1.625	The data flow design doesn't check for validity of input data	Identify the data elements. Develop test procedures to test each of them with missing or null values.
Customize FMEA							
		CL-DD-2	Software retains data when it should not	Yes	1.625	The data flow design is incomplete	Identify data that should not be retained in the event of an abnormal shutdown. For example, if a car runs out of gas while traveling at 70mph, the car should not attempt to resume that speed when the tank is refueled. Develop test cases to invoke an abnormal shutdown and monitor the data that should not be retained.
		CL-DD-3	Software fails to retain data when it should	Yes	1.625	The data flow design doesn't store data to NVM when required	Identify data that should be retained in the event of an abnormal shutdown. For example, if a car runs out of gas, the flat tire indications should still be retained once the car is refueled. Develop test cases to invoke an abnormal shutdown and monitor the data that should not be retained.
		CL-DD-4	Software fails to refresh data when it should	Yes	1.625	The timing of the data refresh is too long or non-existent	Identify the data elements. Develop test cases to invoke a change in those data elements. Verify that the data is refreshed within the time required.
		CL-DD-5	Software refreshes data more often than it should	Yes	1.625	The timing of the data refresh is too short	Identify the data elements. Develop test cases to invoke a change in those data elements. Monitor the rate of refresh and verify that the data refresh isn't affecting normal operations.

Requs AI Software FMEA

6D CDE Agile Software Failure Modes Effects Analysis

- Includes and builds upon Requs AI Edge Case
- Predict the failure modes before they make front page news
- Extends the edge case prediction by “connecting the dots” between the edge case and effects and hazards

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Requs AI Software FMEA Enterprise Edition

All features in Requs AI Software FMEA plus..

- Built in software hazards analysis report generates failure modes by hazard
- Customization feature transforms FMEA to almost any FMEA standard



Project	Survey	Predictions	Failure Modes	Trends
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Hazards and criticality	☐ Exclude non-relevant
State Transition Table	☐ Exclude all failure modes with severity in following range
HW/Comm Interfaces	☐ Filter by hazard
Edge Cases	
Effects	
Likelihood	
Mitigation	
Residual risk	
Critical items list	
Customize FMEA	

Export worksheet

Export Software Hazards Analysis

Start

End

Import FMEA worksheet

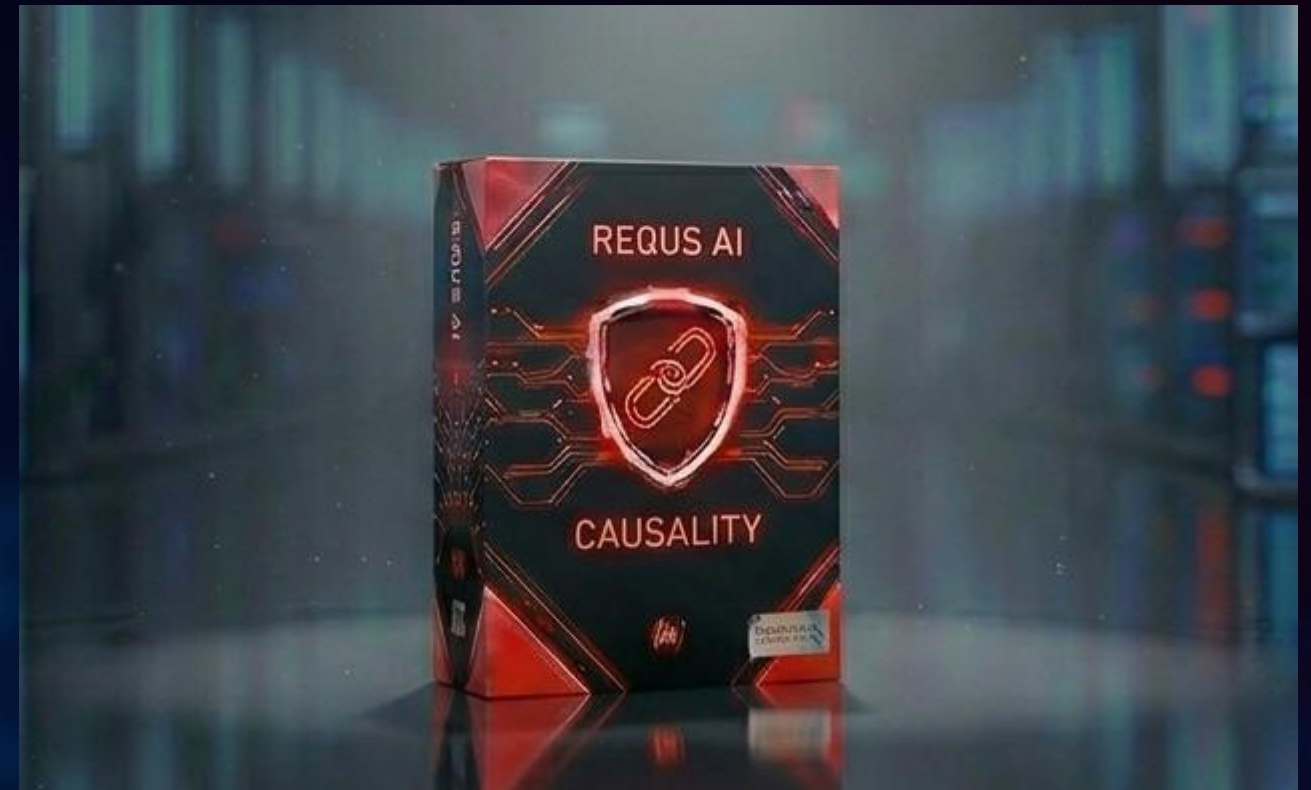
Survey	Predictions	Failure Modes	Trends
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Hazards and criticality	Default Header	Editable Values
State Transition Table		
HW/Comm Interfaces	Local effect	
Edge Cases	System effect	
Effects	Mission effect	
Likelihood	Company effect	
Mitigation	End user effect	
Residual risk	Safety effect	
Critical items list	Hazard tag	
Customize FMEA	Recommended Severity	
	Corrective actions made	
	Changes to user manual	
	Changes to specifications	
	Changes to design	
	Changes to code	
	Changes to test procedures	
	Closed status	

New Additions to the Requs Ai Family

Software Defect Root Cause Analysis

- NLP extracts the root causes from your defect reports
- ML model categories the root causes as per the Common Defect Enumeration
- So, you can laser focus the root causes at hand
- Supports the Requs Ai Edge Case occurrence prediction



Prepackaged edge cases/FMEAs by industry/application

- Jumpstart the edge case prediction
- Prepackaged Edge Case by Industry and Application Type
- Sold in conjunction with either Requs Ai Edge Case or Requs Ai Software FMEA

Get Started: Licensing and Trial Options



Flexible Licensing

- Dedicated and floating license options available
- Yearly subscription or perpetual licensing models
- Cloud and enterprise deployment configurations supported



Schedule Demo

- See your hidden defect risks today with a personalized demonstration session
- Contact sales@missionreadysoftware.com for scheduling
- Personalized demonstration of your specific use case
- Discover hidden defect risks in your projects



Start Trial

- Get hands-on experience with desktop version or try the cloud trial immediately
- Desktop trial version available for download
- Cloud trial at <https://requsaipredict.com> instantly accessible
- Experience full functionality with sample projects

Ready for Tomorrow



Transform Development

Move from reactive firefighting to proactive development with AI-powered insights that prevent problems before they start.



Eliminate Surprises

Never again be caught off guard by edge cases, technical debt, or project failures—
Requs AI sees them coming.



Maximize Success

Deliver projects on time, within budget, and exactly what customers want with unprecedented predictive accuracy.



Ready to Predict the Future?

Join the AI revolution in software development. Experience Requs AI today.

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<https://missionreadysoftware.com>