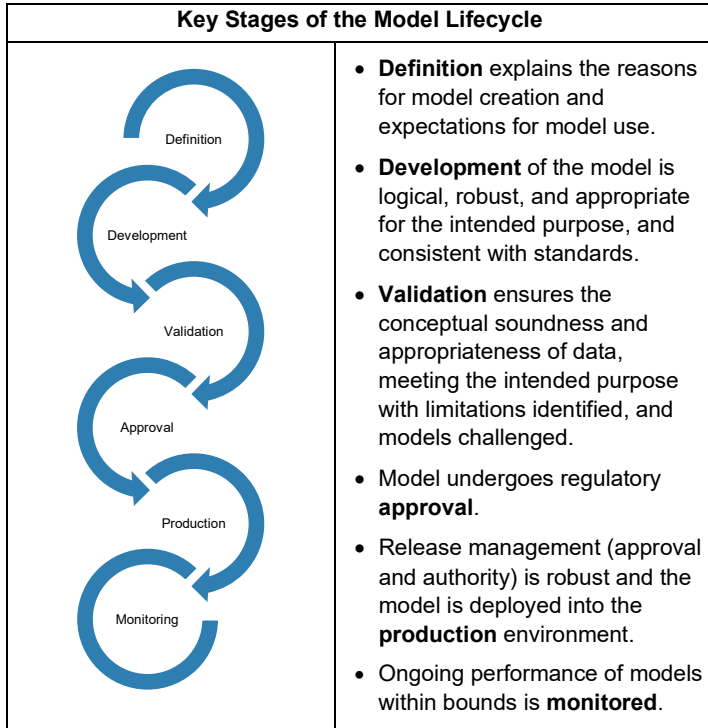


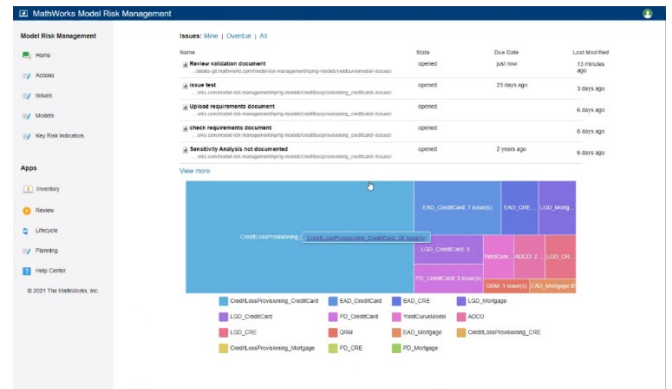


## Managing Financial Models

MathWorks Modelscope provides an open platform for inventory and governance, development, validation, testing, deployment, and monitoring of regulated financial models. Used by some of the world's most complex financial institutions, such as **HSBC**, and some of the most nimble, such as Euler Hermes, which is now Allianz Trade, the solution enables efficiency through automation, providing a transparent, repeatable model development process, robust validation, and dependable deployment with flexible scaling and monitoring in real time.



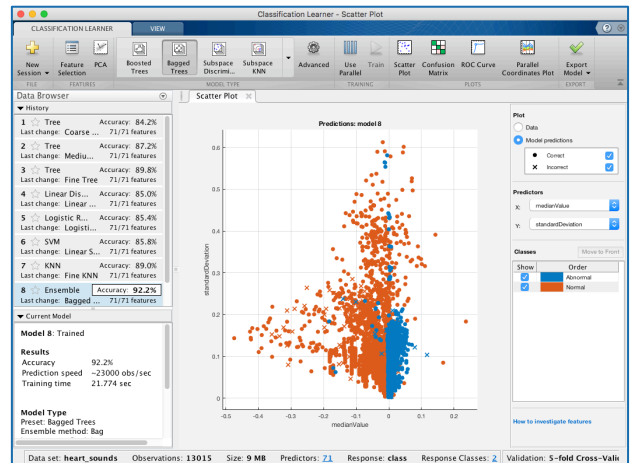
## Modelscope Governance



- Centralized access to models, dependencies, metadata, lineage, audit trail, risk scoring, and model risk reporting
- Workflow tools for managing and reporting model state

*Primary users: model risk managers, everyone across the model workflow*

## Modelscope Develop



- Explore, develop, back-test, and document models and methodologies.
- Use apps and guides for common workflows.
- Improve transparency and reproducibility of the model development process.
- Create reusable model templates.
- Automatically generate model documentation.

*Primary users: model developers, quants, business analysts, business lines, the first line of defense*

## Streamlined Model Workflow

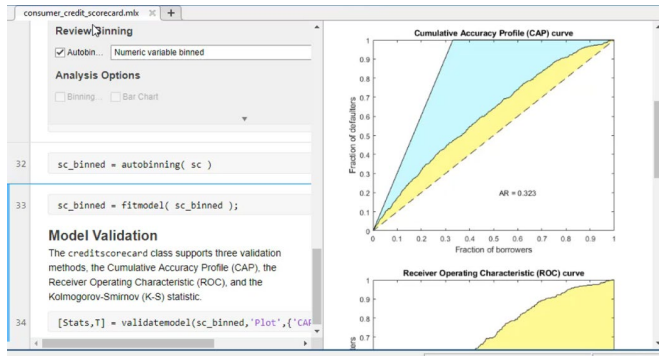
- Leverage the core modeling competency of the risk team.
- Monitor and test the system when required.
- Quickly respond to model reviews from the regulator.
- Significantly reduce key-person risk and model risk.
- Reduce process time from months to weeks.
- Reduce staffing costs for model development, validation, and management.
- Use templates for semiautomatic completion of self-assertion regulatory documents.



*MathWorks Modelscope is made up of six environments that integrate to deliver a streamlined model workflow.*



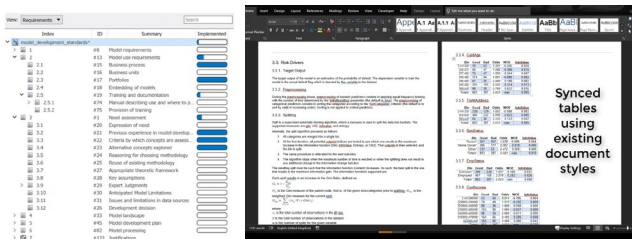
## Modelscope Validate



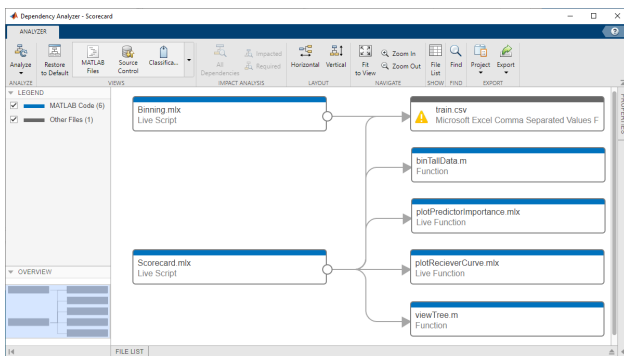
- Document executable live script models inline.
- Perform independent model reviews.
- Perform interactive what-if and sensitivity analysis on model parameters.
- Comment and flag various aspects for response and resolution.

*Primary users: model validation, independent model review, audit, regulator, the second line of defense*

## Track progress of model development and validation against standard documentation, automatic model docs



## Modelscope Test

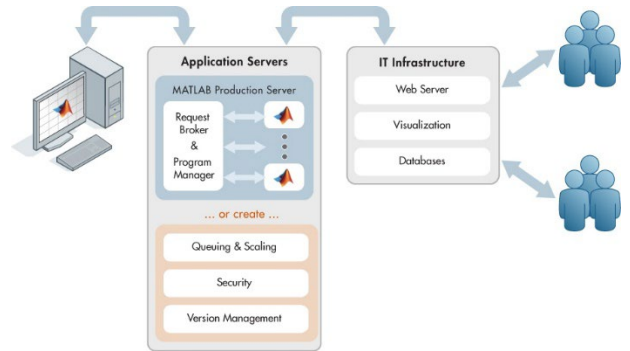


- Provide an environment for approved models to undergo preproduction user acceptance testing.
- Manage suites of automated and manual validation tests, with linking and traceability to development and reviews.

- Execute equivalence, performance, and coverage testing against in-production models against development specifications.

*Primary users: model validation, IT, DevOps, ModelOps*

## Modelscope Deploy



- Deploy models in the production environment without recoding, in any language.
- Integrate with existing technology infrastructures.
- Host production models and scale to end users in a secure controlled environment on premises or in the cloud.

*Primary users: IT, front-office users, business lines, end users*

## Modelscope Monitor



- Configure performance thresholds and alerts for breaches and generate reports.
- Summarize model execution results using a customizable web dashboard.
- Analyze the model usage to determine candidate models for retirement.

*Primary users: risk management, board and stakeholders, regulator, model owners*

**» Learn more about Modelscope, the MathWorks model risk management solution**