Requirements to Automation as Fast as Possible

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Requirements to Automation as Fast as Possible

Populate Story boards & backlogs

To Create Perfect Test Cases

To Create Automation Scripts

To Build better Requirements

To Improve my Existing Test Cases

Design and provision Test Data

Design and provision SV

To Estimate Complexity

To Manage change in Test Cases

Impact and Differences

From One Input

Create Multiple Outputs

Less Language Hops

Less Product Hops

Faster
Better
Cheaper

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CA Drinking Our Own Champagne

Using Agile Requirements Designer

KEEP
CALM
AND
DRINK YOUR OWN
CHAMPAGNE

93%
Time Saving
Improvement

Create Test Cases In

3 Days

Versus 40 Days Before

while improving
test coverage

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Requirements to Automation as Fast as Possible

Innovation
Competitive

Customer Loyalty
Revenue
Market Leader

SECURE

PLAN

OPERATE

DEVELOP

RELEASE

TEST

56%
of software defects can be traced back to ambiguities in requirements

CA AGILE REQUIREMENTS DESIGNER

Maximum text coverage with minimum amount of test cases

Rabobank
30% increase in tester efficiency
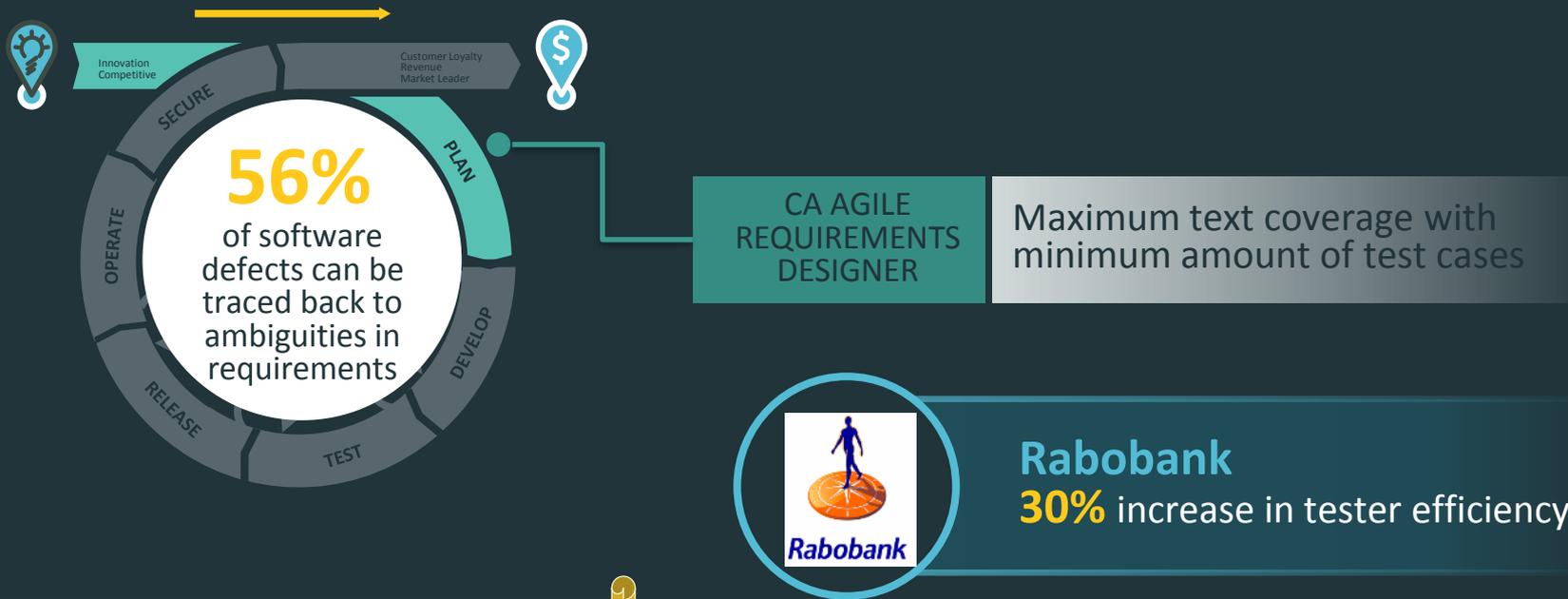
New CA ARD & SV integration allows point & click creation of RR pairs within ARD and published to SV for execution

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Automate the Automation
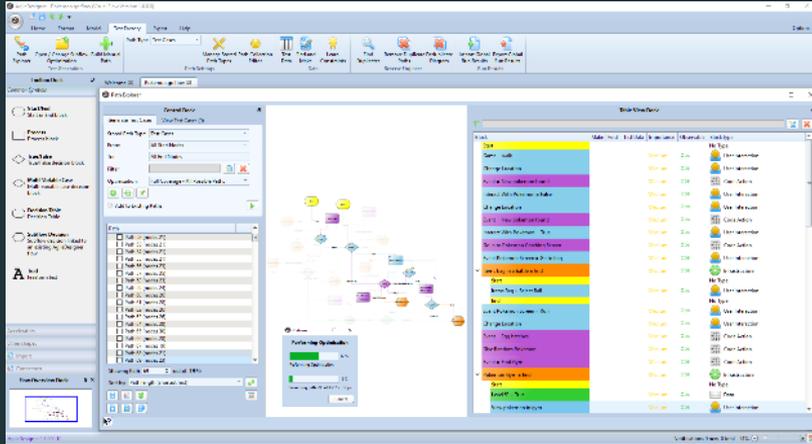
Use Cases Collection:
- Generate Model-Based Users Stories & Requirements (ARD)
- Automate Test Design / Optimize Test Cases and Coverage
- Generate Automation from Model
- Link your tests with perfect data
- Quickly react to change

CA Product modules:
CA Agile Requirements Designer Workgroup + Automation Builder

Challenge
64% of Defect Cost originate in reqs phase
Hyderabad Business School GITAM University Quality Flaws: Issues and Challenges in Software Development 2012

ROI
95% reduction in time to create test assets
Estimations derived from analysis of benchmark data which is a composite from multiple sources.

Value Proposition
Automate
maintenance of test assets following change

Integration Points
- BPM Tools
- AC/Jira/ALM/TFS
- Testing Frameworks

Customer Benefit Anecdotes

RBC Maintenance time reduced from 7.5 hours to 2 minutes

**CGI-Fiko**: Estimated 30% effort saved on managing data

Rogers: 320% over-testing reduced

Large Credit Card Company: 16% to 100% coverage; 5 hour test creation time reduced to 50 minutes

Key Personas

BAs, QA Engineer, Test Automation Engineers
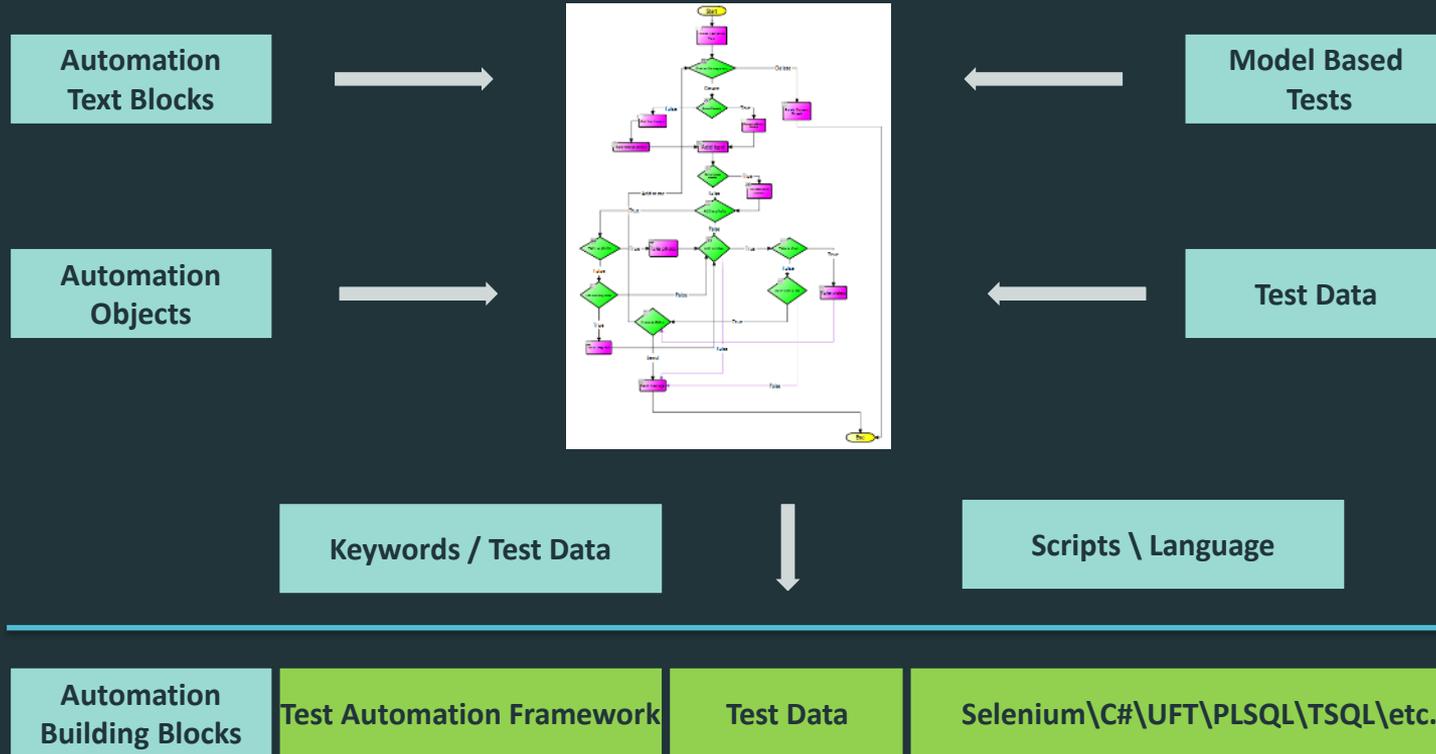
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Automate the Automation

| Automation Text Blocks | → | | ← | Model Based Tests |

| Automation Objects | → | | ← | Test Data |

| Keywords / Test Data | | ↓ | | Scripts \ Language |

| Automation Building Blocks | Test Automation Framework | Test Data | Selenium\C#\UFT\PLSQL\TSQL\etc..etc.. |

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Complex system interrelations

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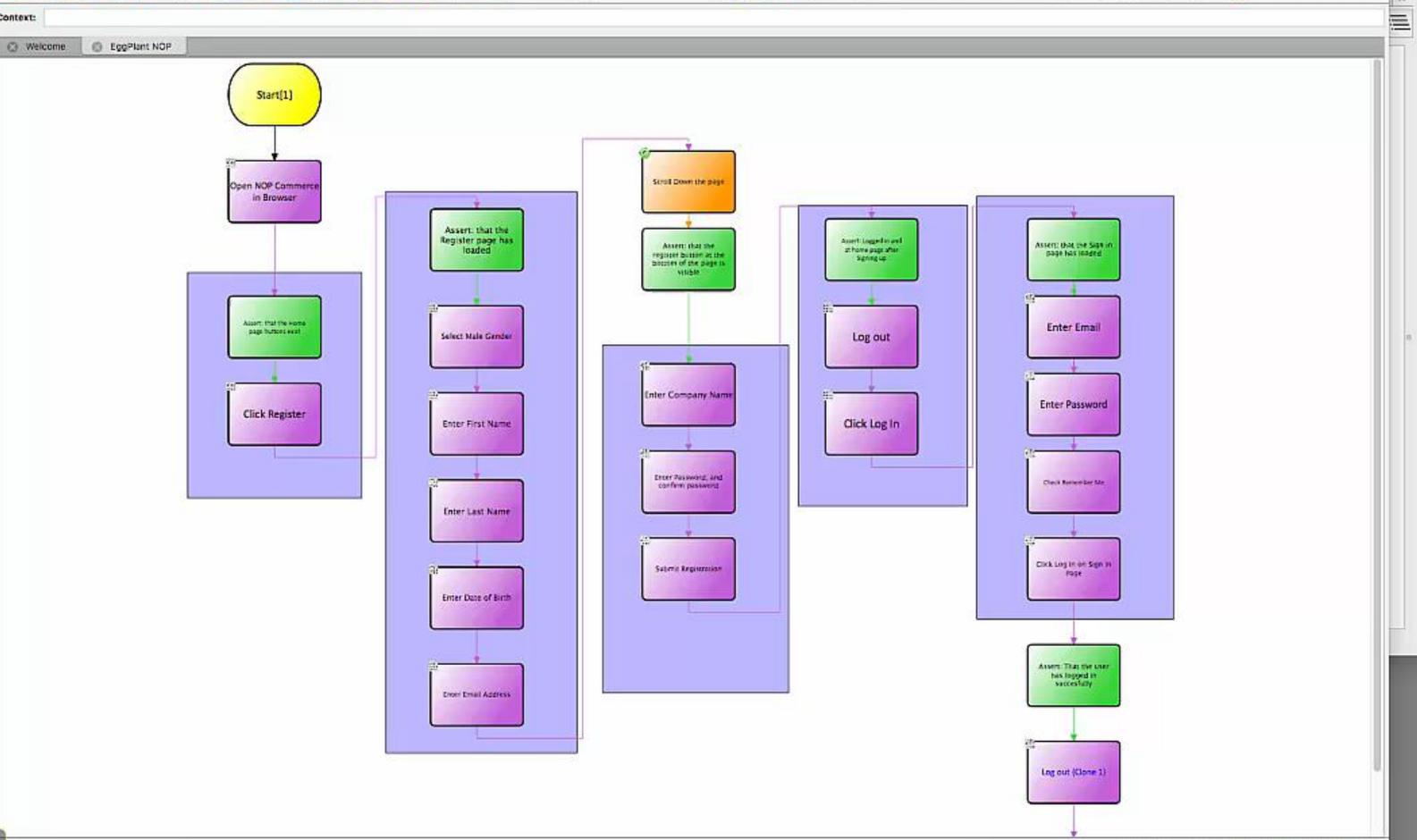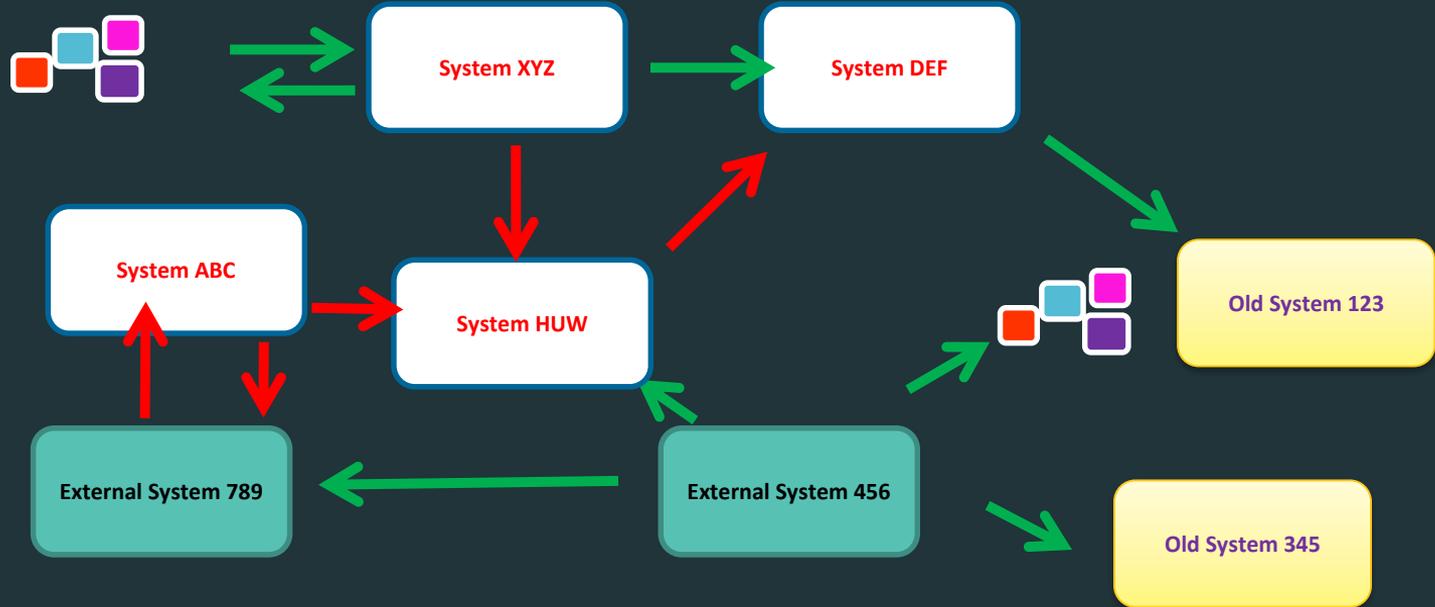
Complex system interrelations
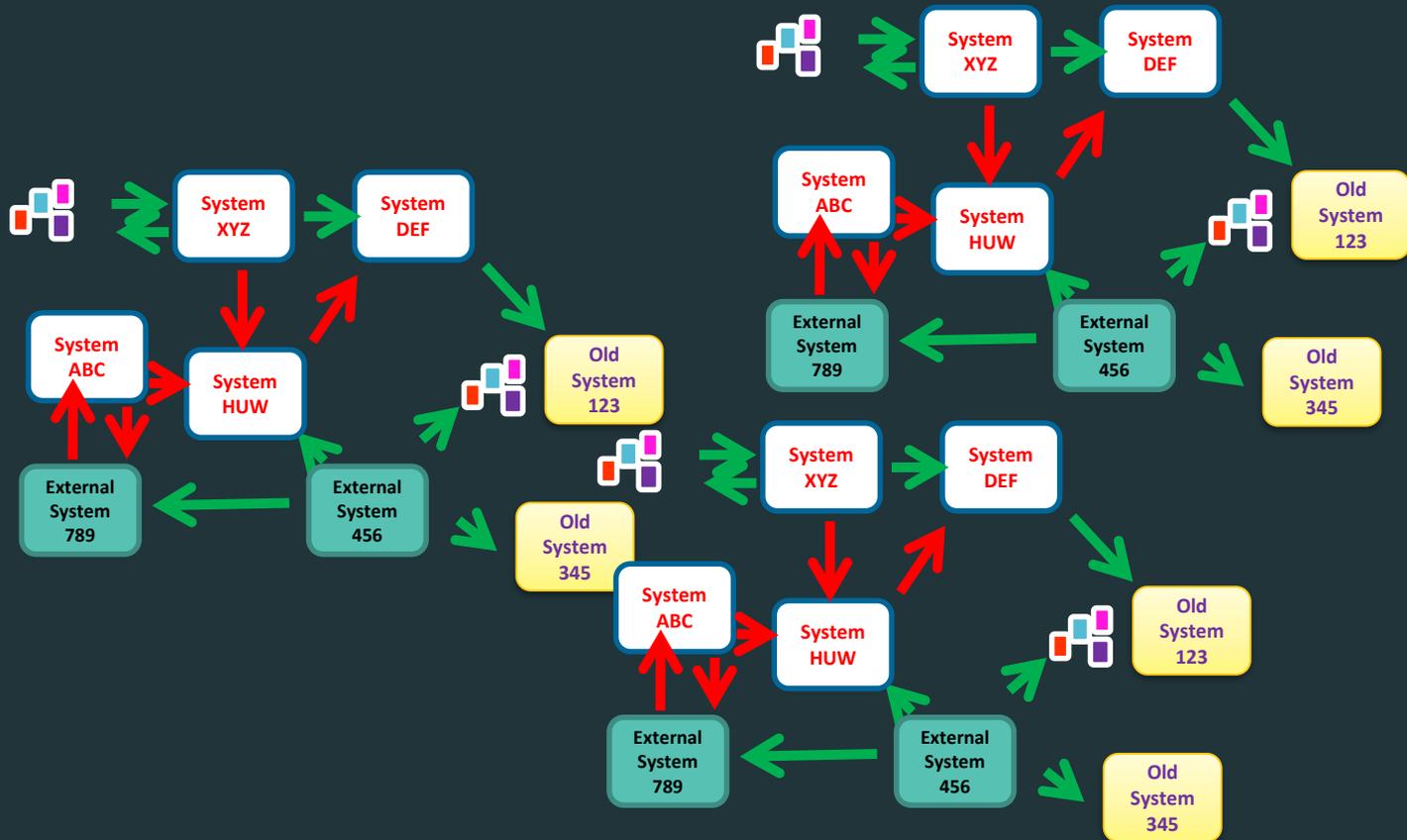
Complex system interrelations
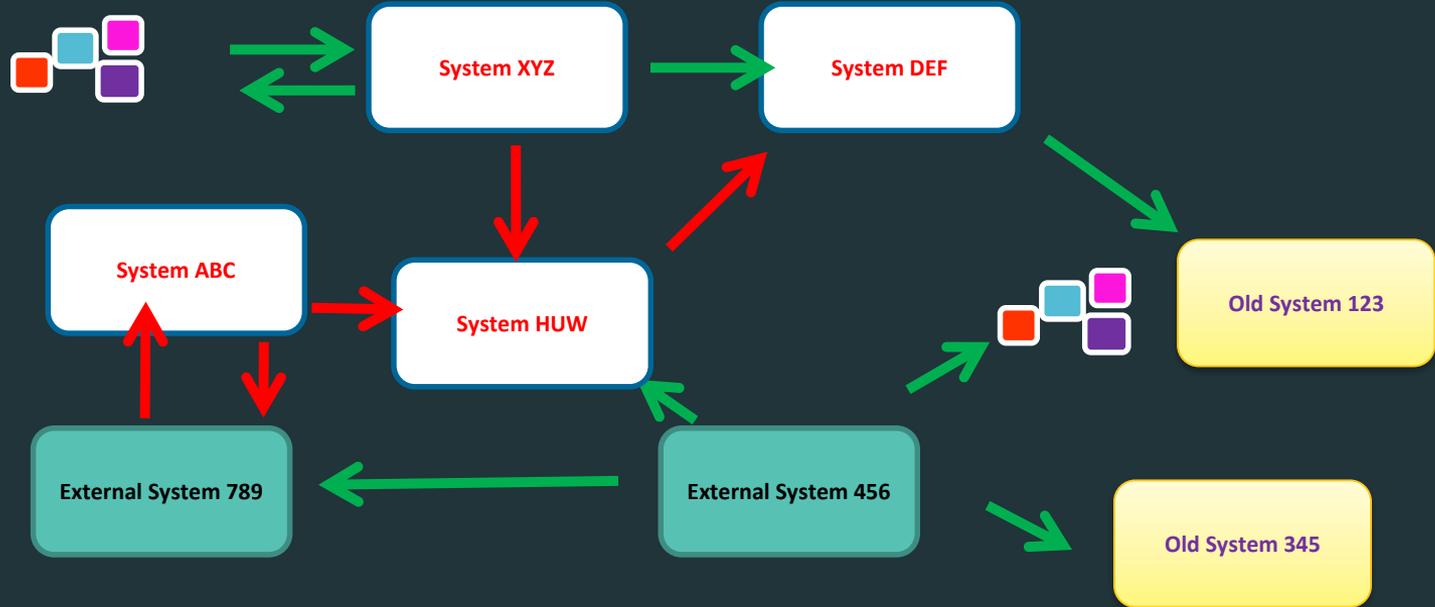
Model of the transactional and database data

CA Test Data Manager

Data discovery, modeling, visualization and profiling

Data subsetting, masking and synthetic data generation

Test Data on Demand™
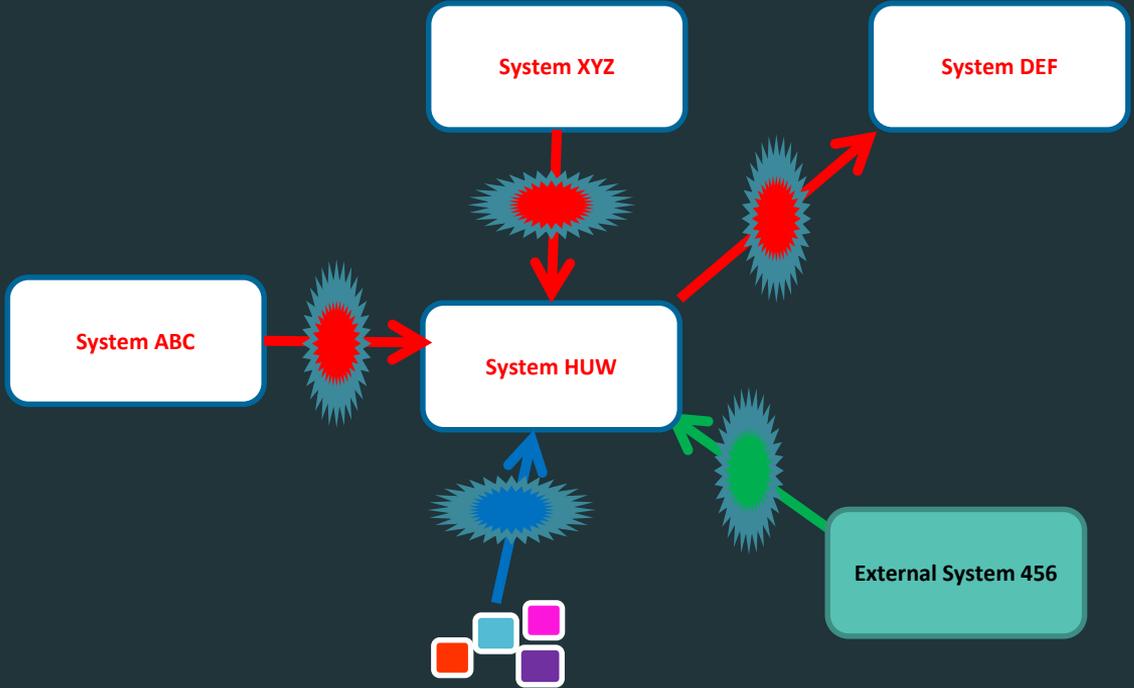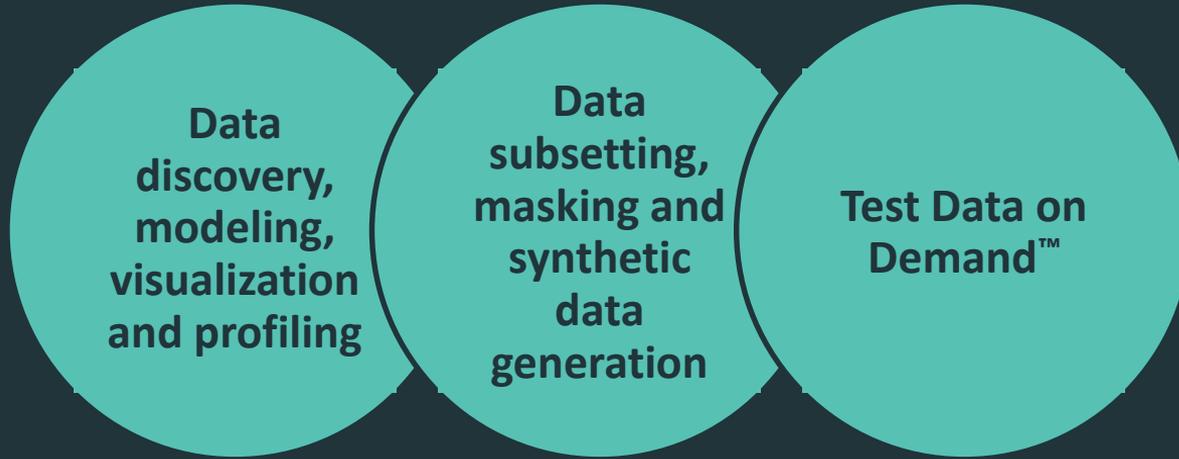
- Review data quality and data errors
- Measure coverage and identify gaps
- Discover relationships
- Identify sensitive data across all systems
- Identify future trends

- Eliminate manual data creation and masking
- Reduce costs and improve quality with short but rigorous test cycles
- Improve test coverage

- Share data across parallel teams
- Clone data as it's provisioned
- Enable self-service, on demand access
- Provide multiple outsources with secure data

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ARAG Group

Ensuring data privacy while eliminating defects in production with CA Test Data Manager

CHALLENGE

Maintain data privacy and anonymize data used in a variety of settings—including test and development.

SOLUTION

CA Test Data Manager

- Could create & manage test data that is both fit-for-purpose and of a high quality

- Significantly improved testing efficiency

RESULTS

- The data solutions delivered to clerks are of a higher quality

- The data used to test those solutions complies with data privacy regulations

CA Test Data Manager
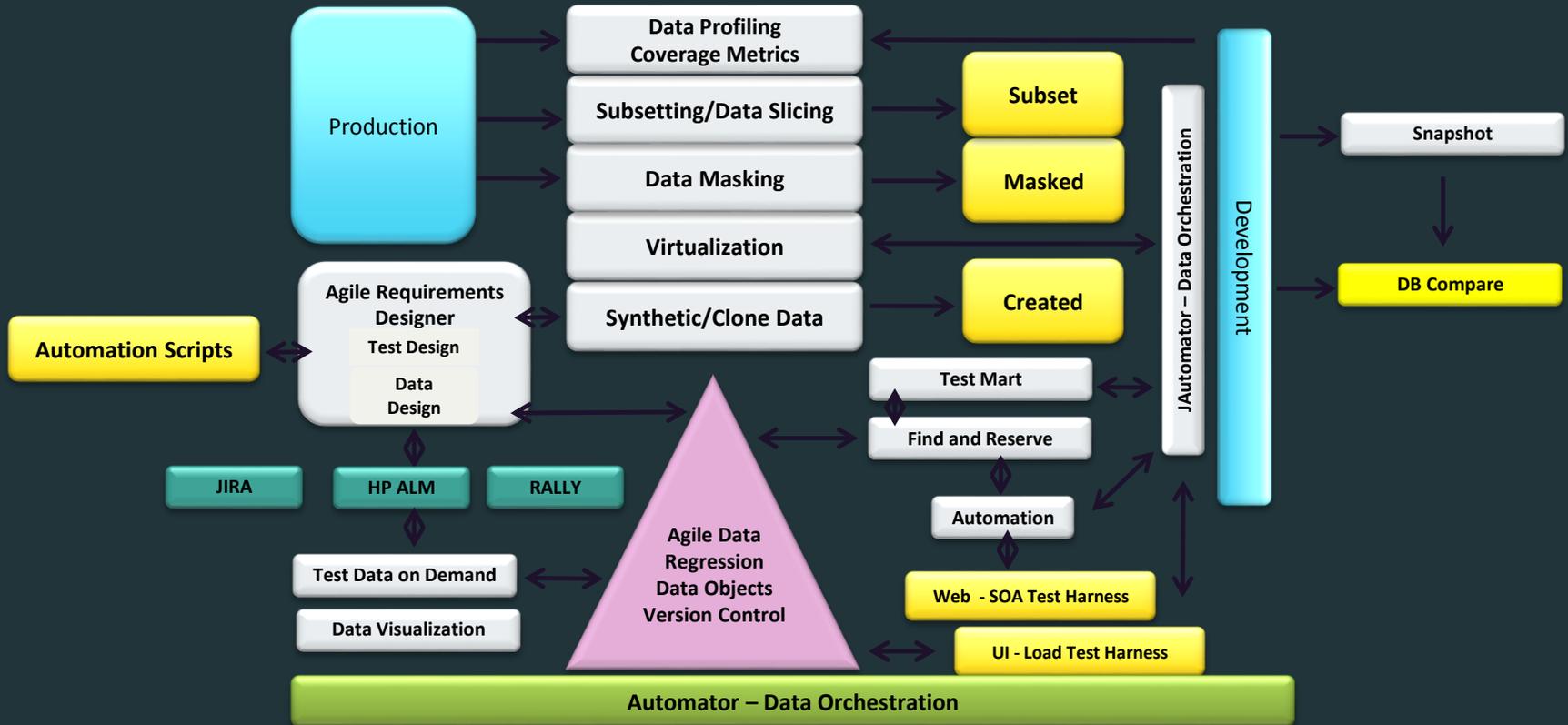
Secure, Find, Reserve, Make, Optimize and Automate Test Data!

DataBuilder – Data Modelling

Continuous Testing

- % of Sprint User Stories Modeled

- # of QA builds received per Day

- Deployment Frequency to Stage
- Change Lead Time
- Change Failure Rate
- MTTR*

- % of Passed Configuration Regression Tests

Enhance Modeled Requirements (Feature Level)

Auto Generate Tests (manual & automation)

Auto Generate Virtual Services Definition and Test Data Definition

Golden Build & Data Stream Received

Validate Build Promotion Criteria

Golden Deployment

Validate Build Configuration

Automated Execution

TEST

Provision Environment and Deploy Build

Application Monitoring (Measure)

Provision Virtual Services and Test Data

- # of Manual Test Cases
- % of Automated Test Cases

- % of Virtual Services Defined
- % of Test Data Elements Defined

- # of Automated Tests Executed
- % of Tests Passed
- # of Defects Found in Test
- # of Defects leaked from Dev
- % Test Coverage
- QA Feedback Time (Time to Fully Test a Build – Target: < 4 hours)

Connected Intelligence

- % of Regression Tests Passed for Application Monitoring Process Configuration
- % of Successful App Monitor Initiation

% of Regression Tests Passed for:
- Environment Provisioning
- Build Deployment

% of Successful:
- Environments Provisioned
- Builds Deployed

% of Regression Tests Passed for Provisioning:
- Virtual Services
- Test Data

% of Successful:
- Virtual Services Provisioned
- Test Data Deployed

Thank you!

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