

# IBM Rational Software Development Conference 2008

WHERE TEAMS ARE **R-HEROES**



## KOBICA™ – Getting ROI on Automation

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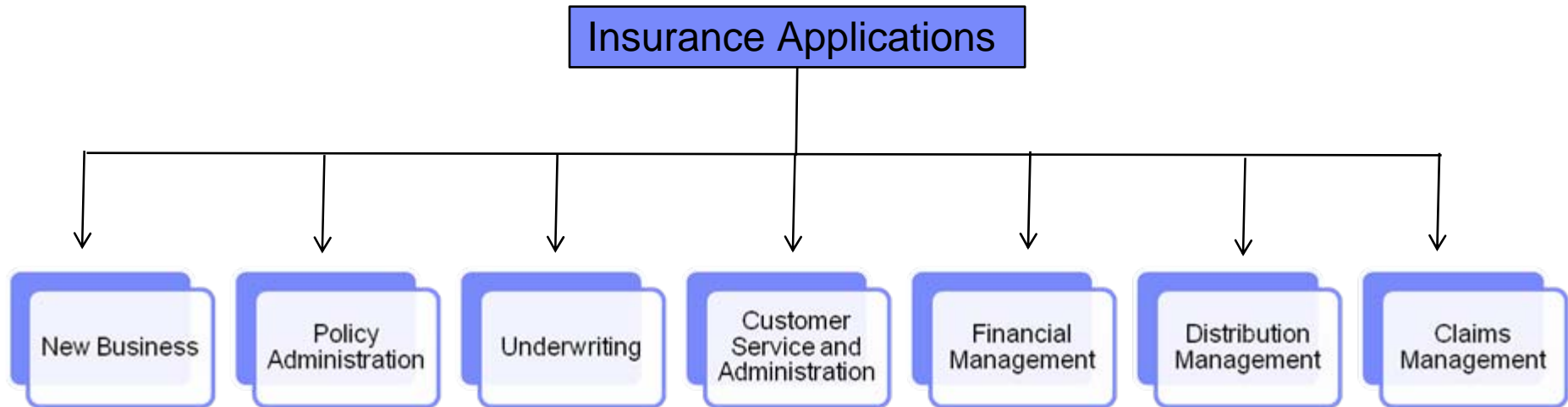
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# Agenda

- Challenges faced in testing complex, Insurance domain applications
- Role of Test Automation in testing complex, Business Driven application.
- KOBCA<sup>TM</sup> – Introduction and Motivation
- Demo of the KOBCA<sup>TM</sup> – A keyword driven framework over IBM RFT
- Case study – How KOBCA<sup>TM</sup> helped a major insurance giant increase their test coverage and reduce the testing cycles by more than 40%



# Insurance Applications - Spectrum



# Insurance Testing : Business Challenges

- Faster Time-To-Market for New products
  - ▶ Refers to the ability to launch the new products faster
  
- Changes in the existing system to meet the new requirements
  - ▶ Refers to the flexibility of customizing existing product based on market dynamics
  
- Ensuring the Quality of products and End user Experience
  - ▶ Technology has to keep pace with Market



# Insurance Testing : Technical Challenges

- Permutations and combinations allowed with product
  - ▶ Multiple variants of same plan
  - ▶ Each plan to be tested with different data combinations (eg. Age, terms, sum assured, finds, Premium, Billing mode)
  - ▶ Bottom line: Testing is highly Data-Intensive
  
- Long term scope of business application
  - ▶ Regression testing assumes a never before proportion
  
- Test Environment Setup
  - ▶ Test data
  - ▶ System dates



## What's the solution

- Given the challenges, How can I test
  - ▶ More effectively (Lesser Defect Leakages)
  - ▶ More efficiently (In reduces time)
  - ▶ More exhaustively (Increased test coverage)
  
- Answer : Test Automation



# Automation Approach

- Conventional Automation Approach
  - ▶ Record\PlayBack
  - ▶ DataDriven Framework
  - ▶ Functional Decomposition
  
- Challenges
  - ▶ Dependency on Automation Expert
  - ▶ Reduced Role of Business Tester
  - ▶ Dependency on Application Availability
  - ▶ Risk involved with change of Automation Tool



## Our Solution: KOBICA™

- Stands for Keyword Oriented Business Component Automation
- Prescribes a flexible framework allowing testers to define test scenario in English
- Automation Scripts are generated automatically based on configured test scenarios

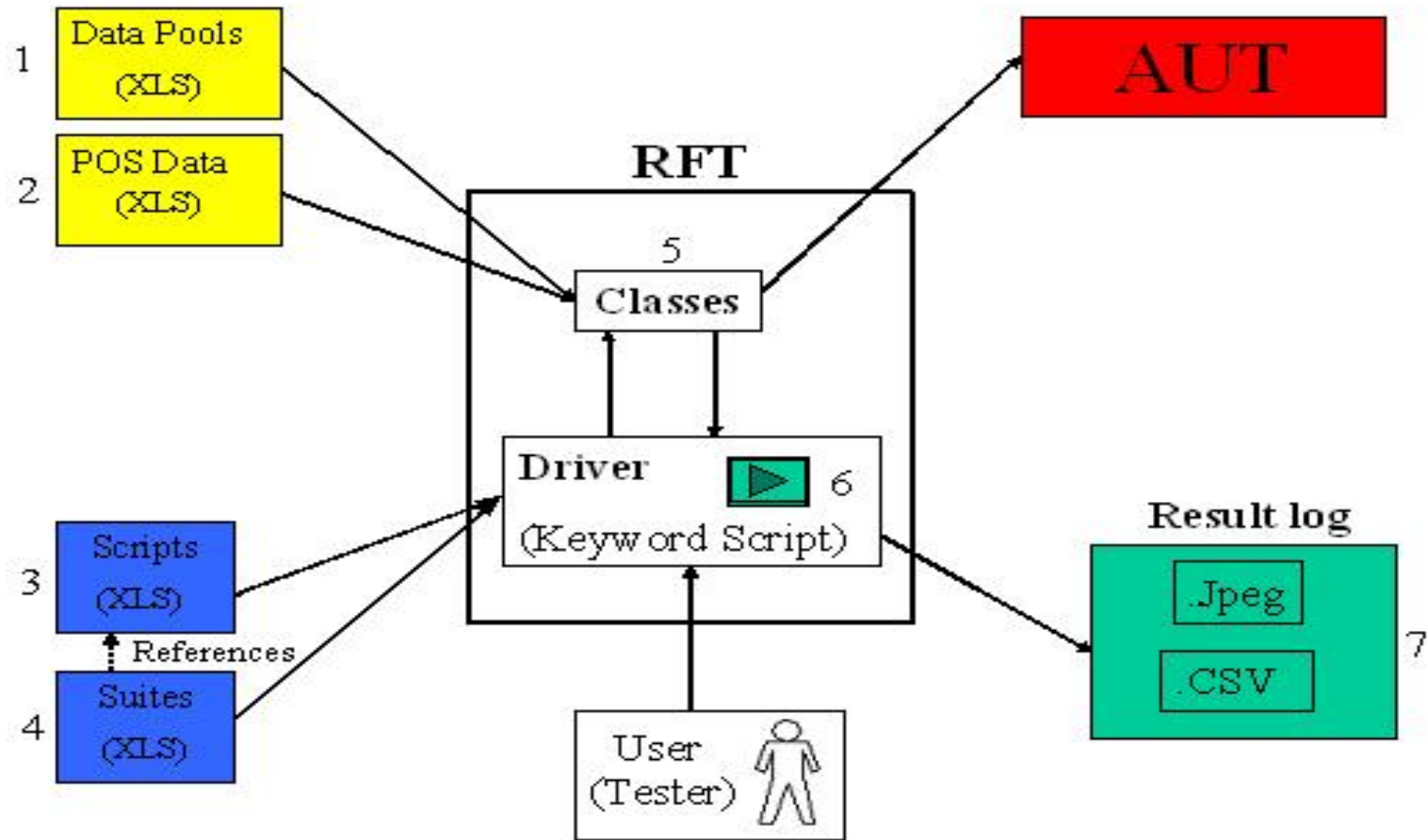


## KOBICA<sup>TM</sup> : Motivators

- Empowerment of Business Experts in test Automation
- Expedite through Re-Use
- Tool Agnostic Approach meaning flexibility
- Effective Test Data Management
- Intuitive Reporting Facility- Lesser time to debug



## KOBCA™ :Elements



# KOBICA<sup>TM</sup> - Elements

- Test Automation Tool
- External Function Libraries
- Object Repositories
- Data-pool
- Business Components
- Test Scripts

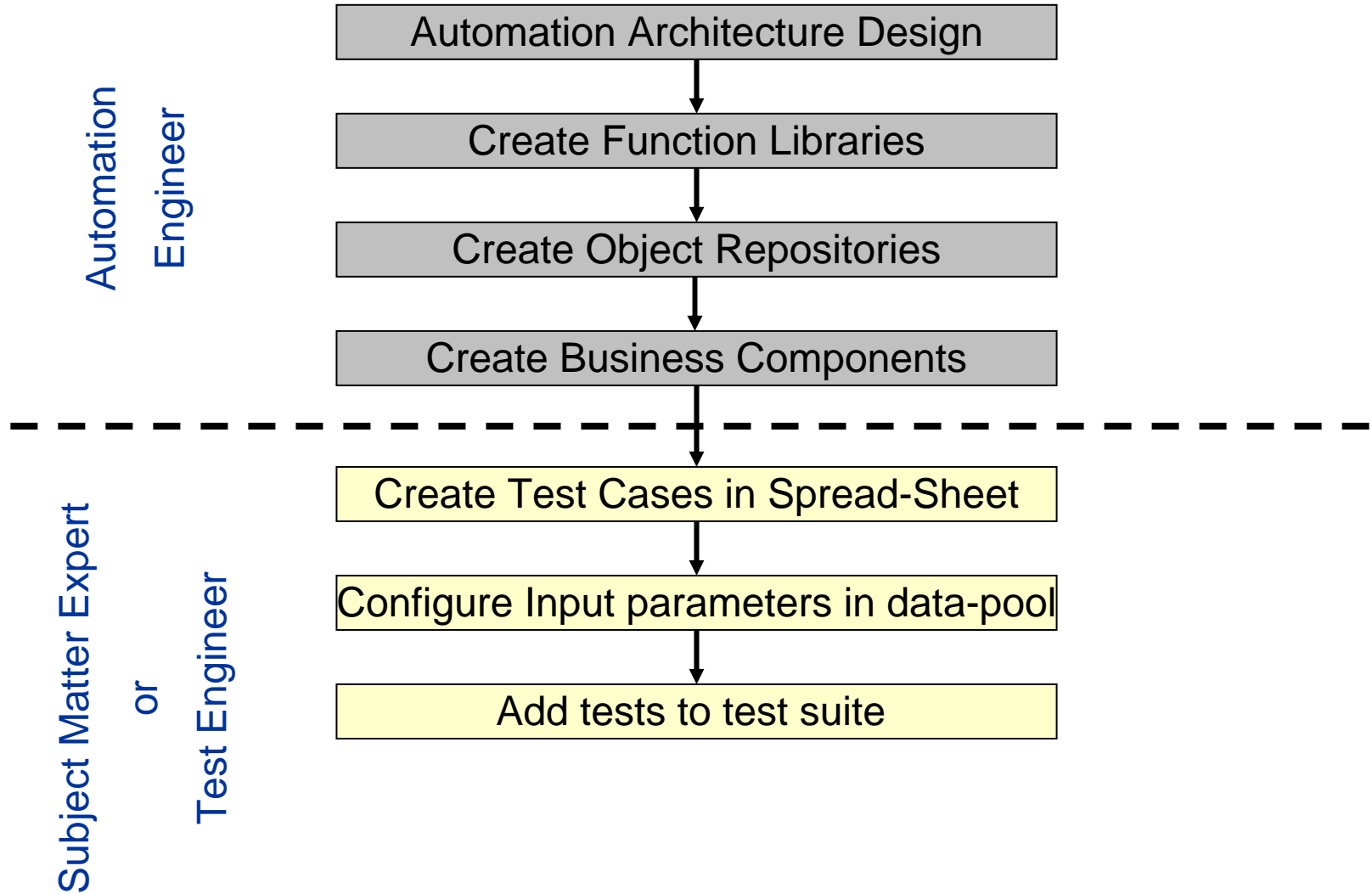


# Automation Tool

- Tool of choice : IBM Rational Functional Tester
  
- Advantages
  - ▶ Validate dynamic data with dynamic data validation wizard
  - ▶ Ensure playback resilient to application changes with ScriptAssure technology
  - ▶ Test script version control for parallel development
  - ▶ Powerful test editing language – Java
  - ▶ Native Java and Visual Basic .NET editor and debugger for advanced testers



# Test Automation Process





# DEMO





# Case Study

**KOBICA™** implementation helps Max New York Life  
in Cutting Regression testing Costs by more than



## MNYL : Pre-Automation situation

- In Pre-Automation Phase functional testing activities in MNYL could be classified in three broad activities
  - ▶ Test Data Preparation
  - ▶ Test Step Execution and Conditional Validation
  - ▶ Test Reporting and Defect Tracking



## MNYL : Pre-Automation situation

- Challenges
  - ▶ Wide spectrum of product offerings
  - ▶ This means high regression testing effort to ensure top quality IT systems
  - ▶ Parallel development tracks for multiple releases – means higher pressure on testing team
  - ▶ Dependency on Data Entry team to create policies for testing



## Test Automation - Approach

- MNYL Partnered with Crestech Software Systems, an Independent testing vendor to study the system and come up with Automation strategy
- Joint Automation Group Set up to validate the strategy and devise the plan
- Study was conducted for Automation tool and IBM Rational Functional Tester was selected for its ease of use and power packed features



# On Demand Automation through KOBICA<sup>TM</sup>

## ■ Implementation

- ▶ implemented by building a highly scalable and modular keyword driven framework
- ▶ automates the testing process while taking care of maintainability and scalability of the testing processes.

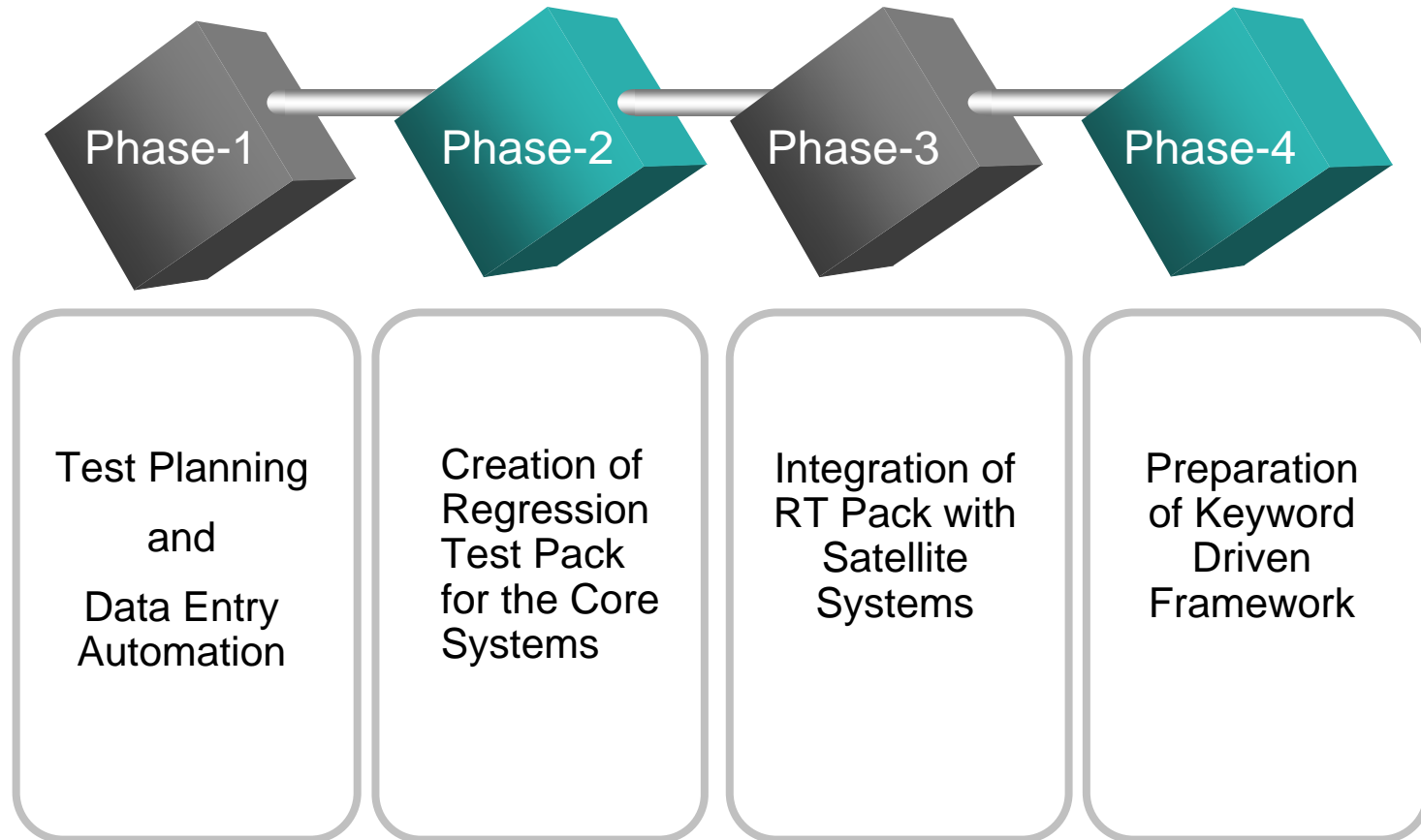
## ■ Key Features

- ▶ Presenting a easy to use interface (Generally spreadsheet based) instead of eclipse based RFT interface to the automation end users to create their test cases
- ▶ Integration of automation framework with Bug Reporting interface (SEVA)
- ▶ Preparation of centralized test reporting interface



# Automation Plan

## Four Phased Approach



## MNYL : Post-Automation situation

- KOBCA™ helped bring the power of automation to the Business analyst and development team
- Ensured a better testing of developed components and their integration early in development life cycle
- A better Test planning beginning from very early in SDLC helped MNYL IT department deliver releases on time and with highest quality.
- Reduction of regression testing cost by 40%.
- Increase in acceptance of products among business users





# QUESTIONS





# THANK YOU

## Learn more at:

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- [Process and portfolio management](#)
- [Change and release management](#)
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