



Tx Performance Testing Capabilities

WWW.TESTINGXPERTS.COM





Globally Top 3 Software Testing and QA Company, with a specialist division, for AI & Digital Engineering Services

 UNIVERSAL	US and UK Co-Headquartered 13 Global Offices	 EXPERIENCE	25+ years of Industry Experience	 DEMONSTRATED	Delivered for 480+ Clients
 RIGHT SCALE	1400+ people Agile & customer-centric culture	 CUTTING EDGE	5% Revenue on R&D & Innovation focused on Efficiency & Effectiveness	 MATURED	ISO 27001 ISO 9001:2015 Cyber Essentials certified

AI at the Core

Agentic AI-led end to end QE solutions | QA of AI systems

Recognized by Analysts and research organizations			
	Leader Quality Engineering		Leading vendor in Gartner Market Guide Application Testing Services 2025
	Leader and Star Performer QE Specialist Services		Rising Star AI-driven ADM Services 2025

Recognized by Industry

Certified 6 times in a row

Recognized by Community		
		
WINNER The Asia Pacific Software Testing Awards 2025	FINALIST The AI Awards 2025	FINALIST North American Software Testing Awards 2025
		
FINALIST National DevOps Awards 2025	FINALIST The European Software Testing Awards 2025	



Customer Satisfaction:
4.7/5 Average **Source Gartner Peer Insights Reviews



200+

Performance Experts

150+

Performance Engagements

7

In-House Accelerators for Performance



Quality



Cost



Compliance



Time to Market

In-house innovations - IPs, Frameworks & Accelerators

Tx-PEARS

Tx-PerfModel

Tx-DBAnalyse

Tx-
MemoryAnalyse

Tx-ImageAnalyse

Tx-PerfVar

Tx-Thread Dump
Analyser

Processes



Performance Centre of
Excellence Process



Assurance Strategy



Metrics Driven
Governance



Risk Management

Dashboards

Application Performance

Response Times

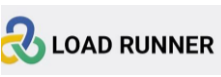
Performance
Improvement

Value Adds

Testing Project Status

Cost of CoE Operation

Transforming Quality Assurance with Next-Gen Performance Testing Solution





Advisory & Consultancy

- Performance CoE Setup
- Performance Assessment and Benchmarking
- Tool evaluation & Feasibility analysis



Assurance

- Load Test
- Stress Test
- Endurance Test
- Failover test
- Volume test
- Scalability Test
- Spike Test



Engineering

- Code level analysis
- DB level analysis
- Production Readiness
- Component level analysis
- Bottleneck Identification and Resolution
- Performance Tuning and Optimization
- Architecture Review and Optimization



Monitoring

- Application Performance Monitoring
- User & Capacity Monitoring
- Synthetic Monitoring

Performance Testing Accelerators

Tx-PerfModel

Automated performance modeling and 'what-if' analysis (prediction)

Tx-DBAnalyse

Automated database analysis framework. Identifies rogue queries and optimal configuration

Tx-MemoryAnalyse

Connection leak and memory leak detection. Access to source code not required

Tx-PEARS

Delivers innovative services to test Non-Functional Requirements (NFRs) across security, usability, compatibility, accessibility and content testing

Tx-ImageAnalyse

Image analysis and optimization product

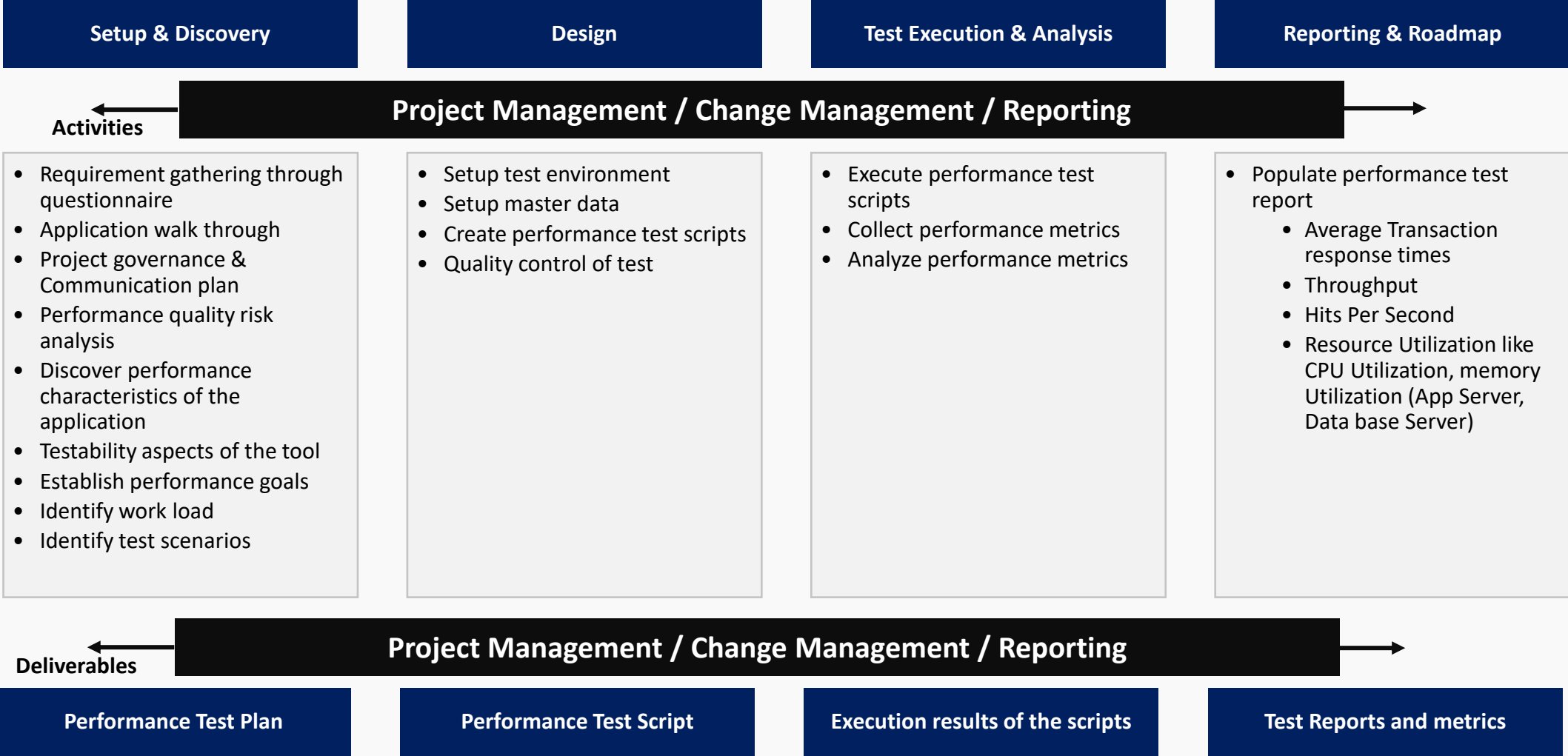
Tx-PerfVar

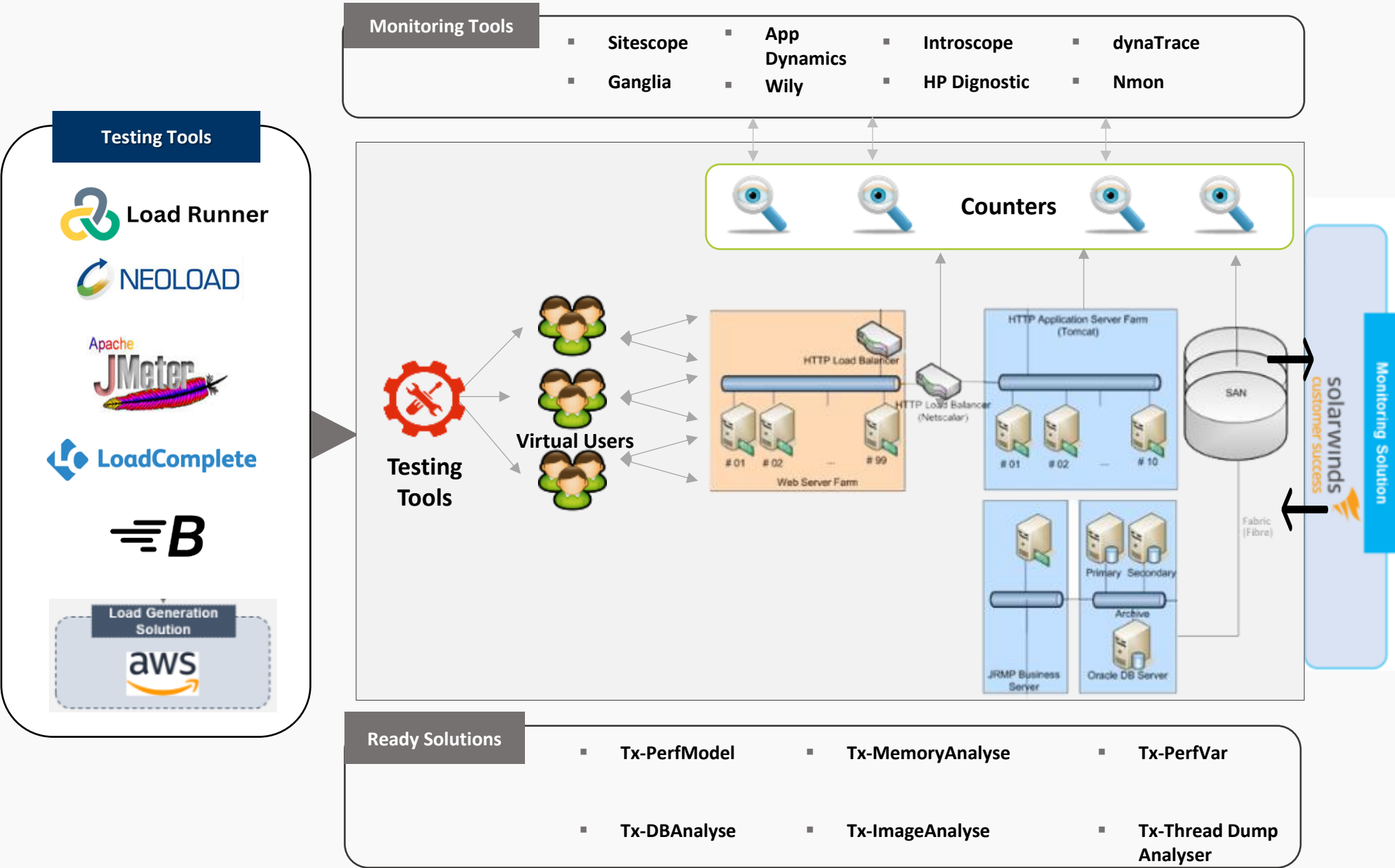
Product for analyzing performance variations across the AWR's

Tx-Thread Dump Analyser

Thread dump analyzer for quantitatively identifying the hot spots on the stack

Our specialized Performance testing and engineering services include our customised & extensive range of in-house solutions







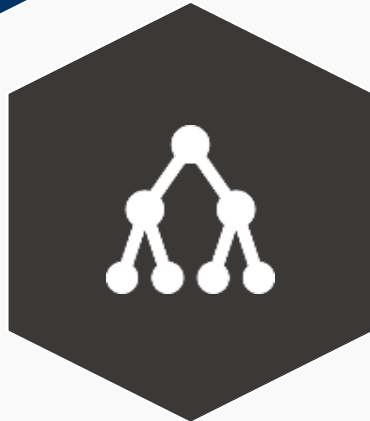
Business Strategy

- User Load
- Service Level Commitments
- Expected Performance
- Anticipated Growth
- Key Events that Impact Volume (seasonal, marketing, etc.)



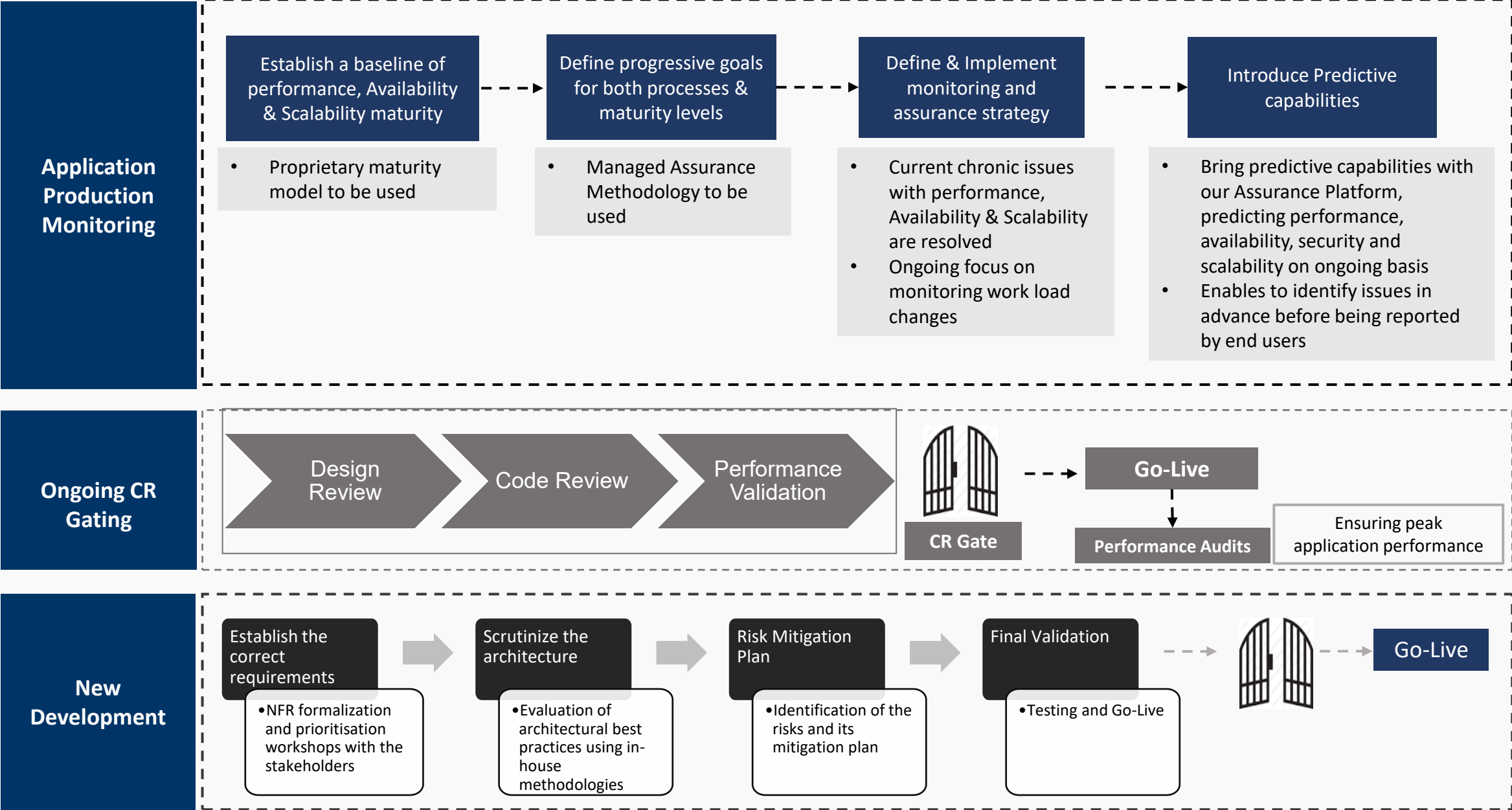
Understand Application Functionality

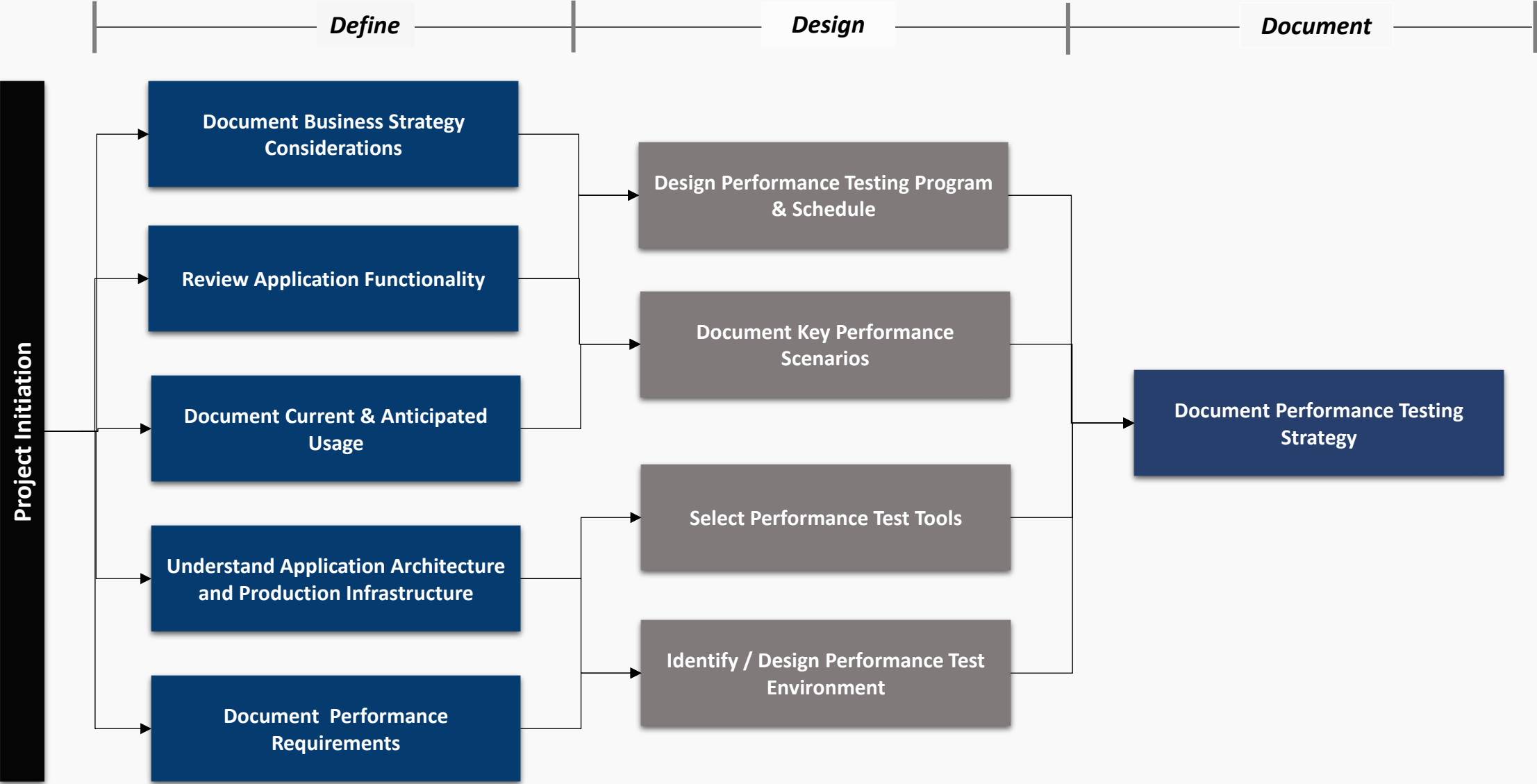
- High Volume Functions
- Key Usage Patterns
- Application Workflow
- Known Performance Bottlenecks



Architecture and Infrastructure

- Application Architecture
- Production Infrastructure & Sizing
- Availability of Environments for Performance Testing





Key usage scenario considerations:



Contractually obligated usage scenario(s)



Most common usage scenario(s)



Performance-intensive usage scenario(s)



Usage scenarios of **stakeholder concern**



Usage scenarios **implied or mandated** by performance testing goals and objectives



Business-critical usage scenario(s)



Usage scenarios of **technical concern**



High-visibility usage scenarios

Case Studies



The Client: Client is a leading Provider of bulk liquids (Oil and Natural gas) storage terminals in Key Strategic Ports.

Business Needs:

Client was looking for the Experienced Test Resources to provide the support in :

- End to End Functional testing services, Performance Testing
- Implement Agile methodology across the organisation
- Data Migration testing services, Bring in test automation process

Client challenges:

- No test framework or defined processes.
- Unmanaged test environments and infrastructure.
- Inadequate information and documentation.
- Unmanaged data generation and regression scenarios.
- Varied technologies across modules led to integration challenges.

High-level Approach/Solution

- Tx deployed a team of 3 resources in a hybrid model i.e. 1 functional test engineer, 1 performance test engineer and 1 test automation engineer
- TestingXperts individuals blended in the existing process and provide the support on the System, Data Migration and Performance Testing for Ongoing sprints for new as well as old application
- Tx team have performed functional and System Integration tests carried out across the application and the bugs found were reported to the development team
- The team was involved in test case design, test execution, defect reporting, re-testing and regression testing in the Agile environment.
- Tx team carried out the performance test of the application and shared the identified bottle necks information in a comprehensive performance report with the development team to fix the issues
- Tx Team automated the required test cases for the application as per the client requirement & Tx team provided Agile Coaching to the client’s team and implemented test processes.
- Tools Used - Load runner & Oracle financial Cloud

Key Benefits



Streamlined test processes



Automation and Performance Testing reduced the manual effort.



Providing Support on Integration and Regression Scenarios along with providing exploratory testing for stable applications



Team trainings were organized.

The Client: HT Media is an Indian mass media company based in Delhi, India. It has holdings in print, electronic and digital media. HT media recently launched a Digital media platform named as OTT Play. OTT Play is a digital platform where HT media had added multiple streaming partners (like zee, sonyliv etc.) with thier multiple contents.

Business Needs:

- Client was looking for Performance Testing for a web application with a load of upto 10,00,000 concurrent users.
- To ensure the application is able to sustain the desired load and falls within the SLA of < 0.5 sec responses as a performance benchmark.
- To identify the user-load for isolated components followed by performing scalability testing.

Client challenges:

- Testing was done in Production from 2AM to 6AM daily.
- Scaling issues were fixed by optimizing cluster and node settings.
- Changing focus from API to server optimizations.

High-level Approach/Solution

- Tx deployed a team of 2 resources i.e. one Senior Performance Test engineer and one Performance Test engineer for the engagement.
- Tx team understood the application flow and started worked upon enhancement of:
 - Script Recording
 - Script Enhancement and Script validation
 - Series of Load Test Execution followed by report creation.
- Tx Team executed the load test with different users loads from 200-10,00,000 Vusers to find system is capable to handle the load .
- Tx team created Interim report for each test with the observation regarding the behavior of executed test with all important details like average response time, TPS(Transaction per second) error rate.
- Tx created detail test report by analyzing the tests responses and monitoring server stats over Grafana, Amazon Cloudwatch and New-Relic to find out the performance bottlenecks.
- Tools Used:
 - JMeter(VM for generating load),
 - Amazon Cloudwatch. New Relic

Key benefits



Better quality of the system framework is ensured by Performance test, covering the downstream functionality.



Client was able to determine the load bearing capacity of each servers within the architecture.



Improved stability of overall application, Provided round the clock support.

The Client: JA Titan is a simulation-based program in which high school students compete as business CEOs in the phone industry, experiencing firsthand how an organization evaluates alternatives, makes decisions, analyzes the outcomes of those decisions, and then strategizes what to do next. With a focus on financial literacy and insights into the workforce, JA Titan brings business economics to life.

Business Needs:

- Client was looking for Performance Testing for a web application with a load of more than 1500 concurrent users.
- To ensure the application meets desired load/performance benchmark.
- To identify the user-load on which the application is breaking.

Client challenges:

- The application is based on a unity gaming and due to the architecture failure of application, application was not able to handle the user-load beyond 600 users.

High-level Approach/Solution

- Tx deployed a team of 2 resources i.e. one Senior Performance Test engineer and one Performance Test engineer for the engagement.
- Tx team understood the application flow and started worked upon enhancement of:
 - Script Recording
 - Script Enhancement and Script validation
 - Load Test Execution and report creation
- Tx Team executed the load test with different users load from 100-600 users to find system is capable to handle the load .
- Tx team created Interim report for each test with the observation regarding the behavior of executed test with all important details like average response time, TPS(Transaction per second) error rate.
- Tx created and analysed the test by using Microsoft Azure monitoring tool to find out the performance bottlenecks.
- Tools Used:
 - JMeter(VM for generating load), Microsoft Azure.
 - Http Watch for client-side monitoring

Key benefits



Better quality of the system framework is ensured by Performance test, covering the downstream functionality.



Improved stability of overall application, Provided round the clock support.



Client was able to determine the load bearing capacity of each servers within the architecture.



The Client: The client is a banking tech company. The company provides credit and debit processing, BNPL, core banking, and "mobile experiences." Zeta provides its products to banks and fintech globally

Business Needs:

The client was looking forward to an enthusiastic performance testing team to test their highly critical financial applications involving many transactions on the web as well as mobile apps and required the following testing:

- Functional Testing
- Automation Testing
- API Testing
- Performance Testing

Client challenges:

- Tasks mismanagement as a lot of ad hoc tasks get allocated during the release cycle leading to delays in test deliverables. Also, the team is struggling to get VDI access
- Task prioritization is quite a challenge as priority keeps changing

Key Strategies and Solution Implemented

- Tx worked closely with the client’s business teams to finalize the testing scope, test execution plan and deliverables for the successful functioning of its both web & mobile financial applications and therefore remained focused to meet client expectations and meeting the business SLAs for the defects & the response time
- To manage task mismanagement, Tx implemented JIRA as a test management & bug-tracking tool for all defect management and execution activities
- Performed risk-driven functional testing to ensure optimal test coverage and discovers defects early in the test life cycle and executed testing on various browsers such as Chrome, Firefox, IE, & Safari and mobile devices for both Android & iOS platforms
- Tx leveraged its in-house automation testing framework named “Tx-AUTOMATE” to execute mobile automation by using Appium and API automation through pytest with Python as well as REST-assured
- Tx leveraged its in-house performance testing framework named “Tx-PEARS” for the quick start of the project, and used in-house accelerators for thread dump analysis image analysis and provided tuning recommendations
- Planned and performed various performance testing types (Load, Stress, Volume, Benchmark & Endurance) and submitted interim reports after every round of test
- Analyzed the application bottlenecks, created detailed reports & suggested possible recommendations. Identified performance issues were fixed by the Client’s development team. Tx performed retesting after performance tuning to validate the fixes

Tools Used

- JIRA, SharePoint, TestRail, Postman, Appium, Python, REST-assured, Kibana, Jmeter, OctoPerf

Key benefits realised



Maximum cost saving in high-quality offshore environment ensuring compliance with quality standards



Lower maintenance cost of applications due scalable automation solution



Nearly 100% of Resource Utilization



Improved stability of overall application by eliminating bottlenecks

A background image showing a close-up of two hands shaking in a firm grip, symbolizing a business deal or agreement. The image is dark and moody, with a large, solid red diagonal shape overlaying the right side. The text 'Thank You' is centered in a white box on the left side.

Thank You