

ERP Testing Capabilities

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QA involvement at inception



- ✓ A holistic approach to Quality Assurance
- ✓ Well defined QA plan and resource requirement aligned with ERP Implementation plan
- ✓ Documented knowledge from Business required for QA activities
- ✓ Requirement defects eradicated
- ✓ End to End Data requirement gathering and strategy
- ✓ Gap analysis
- ✓ Agreement on ways of working and governance plan
- ✓ Traceability for coverage
- ✓ Optimized QA strategy with end-to-end QA coverage for functional and non-functional testing needs
- ✓ Forecasted budget
- ✓ Clarity on required tools to support QA
- ✓ Clearly defined roles and responsibilities to avoid redundant QA work

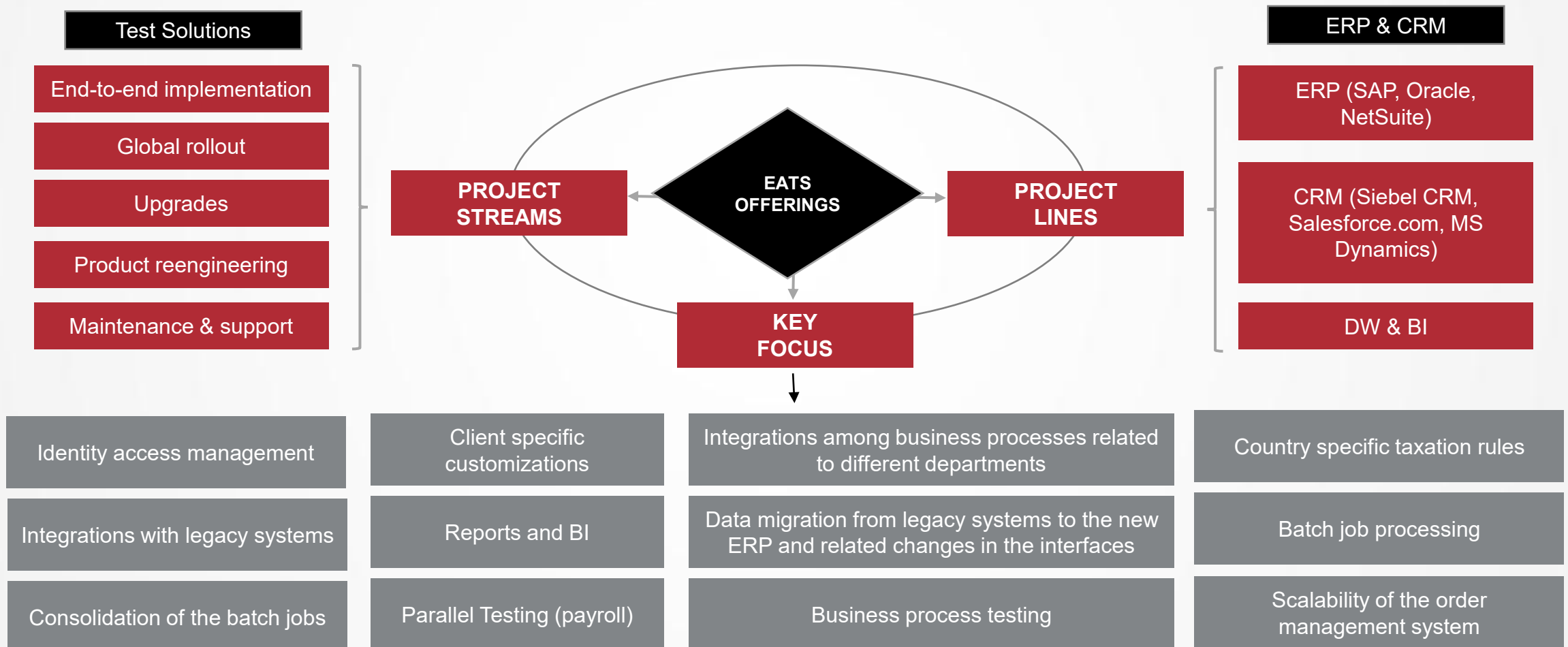


Involving Tx QA consultants during inception for their ERP implementation enables customers to plan and budget in advance along with a clear and agreed approach to implementation and QA. A structured delivery methodology developed in collaboration with the implementation partner focused on efficiency and effectiveness of delivery with a self-governing model providing assurance on the one-team model.

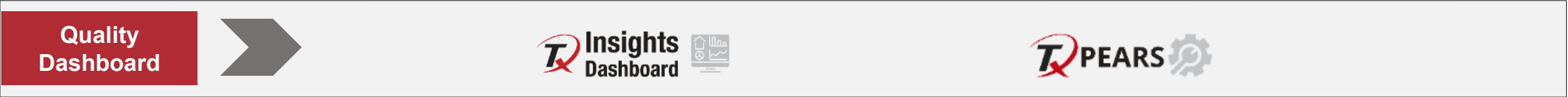
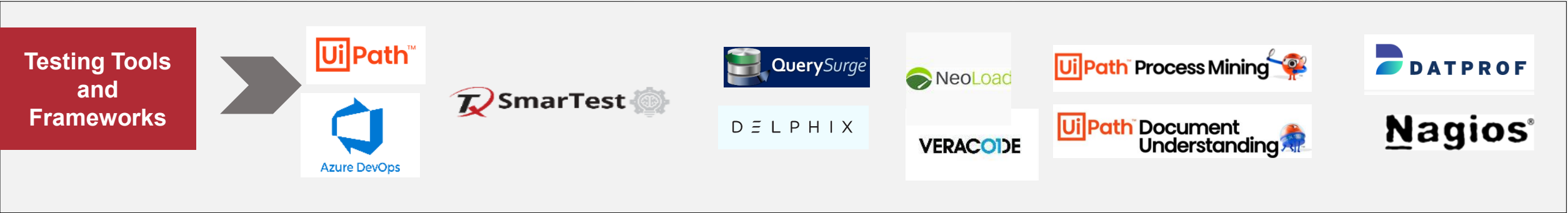
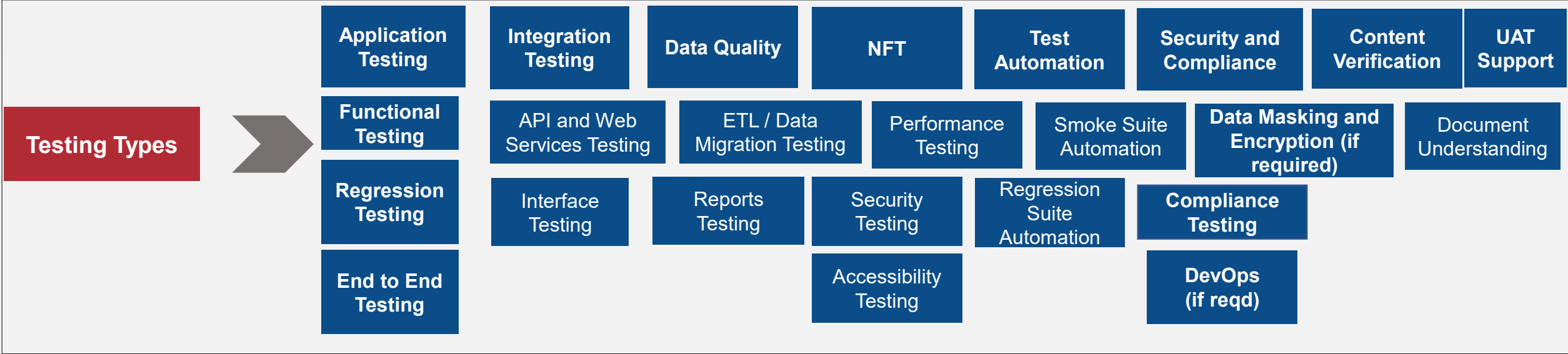
Enterprise Application Testing Services



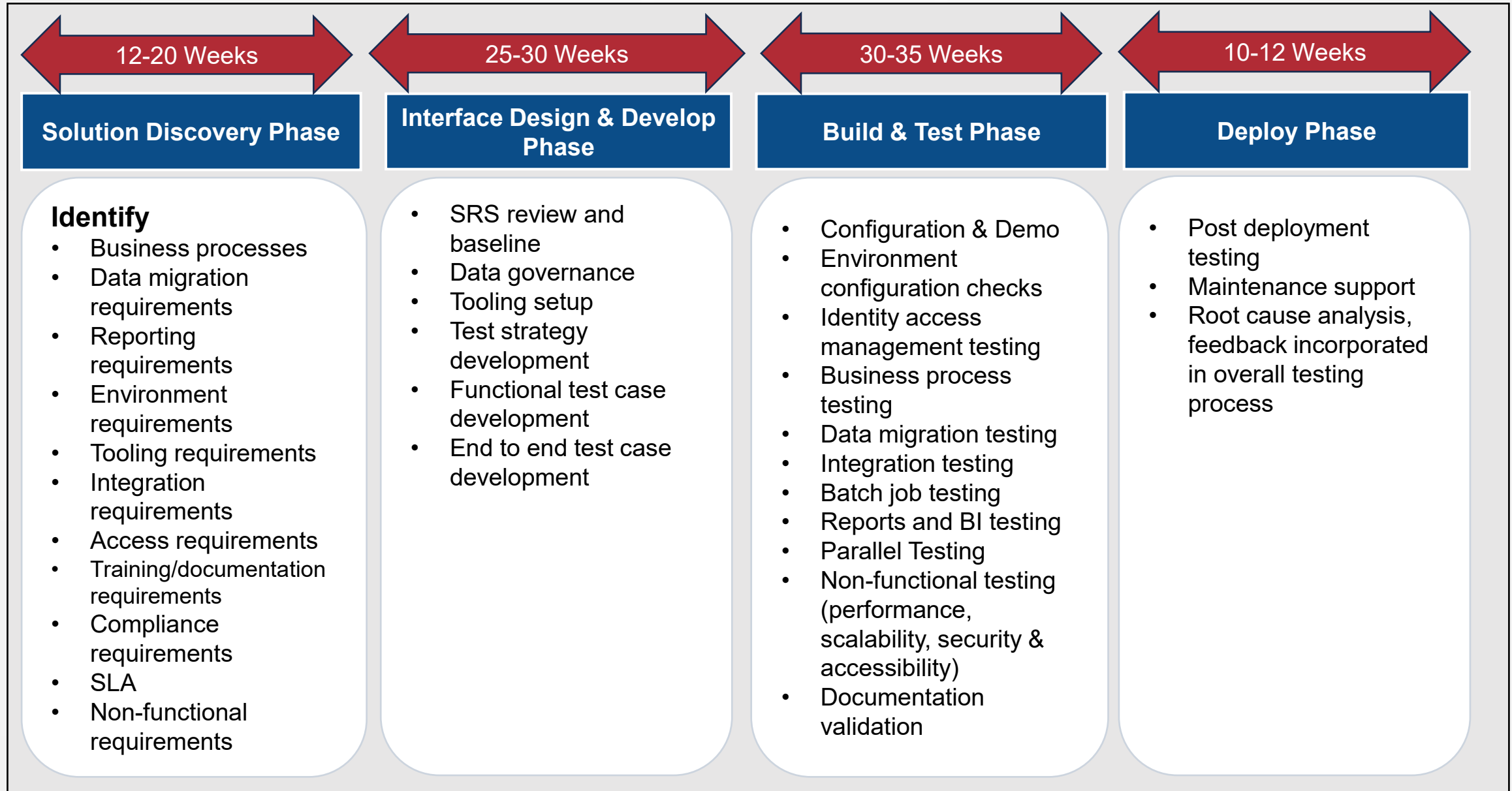
Our Enterprise Application Testing Services (EATS) include a unique blend of industry-specific, end-to-end solutions and technical excellence. Through proven expertise in executing large and complex testing engagements, TestingXperts ensures quality at every phase of the testing life cycle. EATS provides comprehensive services across multiple products and ensures improved operational efficiency with a focus on quality. The image below provides a snapshot of our offerings:



QA Approach for Key Focus Areas



ERP Testing Approach



Analysis Phase

- Collaborate with the customer to realize their goals & objectives in testing the ERP System
- Analyze & understand the ERP system requirements & Business logic been implemented
- Scrutinize the module level integrations & customizations along with non-ERP applications
- Study the process defined in UI layer , middleware layer (Web services) and database schema of the ERP system
- Understand the release process been implemented & frequency of ERP system patch updates
- Study the existing testing process followed & test infrastructure available

Planning Phase

- Identify the applications to be tested (On premise , Cloud & Mobile) and the respective testing types (User Interface , API , Data) to be carried over it
- Outline QA strategy along with quality metrics for ERP testing
- Estimate the efforts for the testing process (Design & Execution)
- Define the different levels of testing to be carried out
- Establish the Point of contacts /SME's/ Consultants to be reached out for clarifications
- Identify & Set up test tools that can be smoothly integrated with ERP system
- Setup the testing team and sensitize their roles & responsibilities

Design Phase

- Ensure proper test coverage of scenarios encompassing the integration areas , configurations & customization of the ERP system
- Design & Prioritize the business-critical test scenarios by collaborating with the stakeholders
- Identify the best practices to be incorporated during use case design & development
- Streamline the test data selection process by ensuring post data refresh challenges
- Ensure a proper & regular review mechanism to be followed & establish traceability matrix
- Ensure Regression suite exists comprising “What to test” scenarios and is updated/maintained on sprint level releases
- Ensure testing is integrated into CI/CD pipeline to expedite defect detection
- Strive for continuous improvement & optimization of the QA process

Execution Phase

- Conduct Change Impact analysis to drill down the area of impact post the transport movement/system updates
- Set up test environment & conduct smoke test to ensure seamless flow of data through the integrations
- Conduct regression & integration testing within the timeframe based on the impact analysis report ensuring that the critical path of the business are working
- Examine and document the test execution results for reference & report to customers on the test execution summary

Generic & Nice to have practices

- Establish inhouse CoE ERP Lead who overlooks the Team & Strategy
- Having Architects/Consultants w.r.t each modules in ERP (Ex - Production , Purchase ,Finance)
- Training/Upskilling the CoE team w.r.t best practices & market trends
- Establish vendor support for the respective ERP tools if needed
- Aligning the CoE team with business & delivery Personnel
- Adopt a Tiered Approach to test different layers of ERP (Front end , Business & Database)

Quality Gates



User Story Level

Acceptance Criteria
100% Met
(Scrum team)

Associated tasks 100%
completed
(Scrum Master)

Coding Standards
Adhered to
(Dev)

Unit Test Automation >
70%
(Dev)

Functional test
Coverage 100%
(QA)

Integration Check
Points identified
(Dev, QA)

Test case Execution,
P1, P2 – 100%
P3 – 70%
(QA)

Defect Closure
P1, P2 - 100% Closed
P3, P4 – 60 % Closed
(Scrum Team)

Sprint Level

Sprint Acceptance
Criteria 100% Met
(Scrum team)

Code coverage >80%
(Dev)

Unit Test Executed and
passed - 100%
(Dev)

Functional Tests
Coverage 100%
(QA)

Integration Test
Coverage 100%
(QA)

Regression Tests
Executed and passed
100%
(QA)

All Automation Tests
Executed and passed
(QA)

Defect Closure
P1, P2 - 100% Closed
P3, P4 – 60 % Closed
(Scrum Team)

Release Level

All Sprint Accepted
(Scrum Master)

Deployment Ready
To Master branch
(Dev, DevOps)

End to End Test
Coverage>95%
(QA)

Acceptance Tests
defects< 5%
(Business)

End to End
Regression >60%
Automation
(QA)

Product document
requirements met
(Product Owner)

Defect Closure
P1, P2 - 100% Closed
P3, P4 – 60 % Closed
(Dev and QA)

Agile Process
Compliance
(Scrum Masters)

Common ERP Migration Testing Challenges & Tx Mitigation Strategy



Area

Data Migration Complexity

Integration with Legacy Systems

User Adoption and Training

Timeline and Budget Management

Data Security and Compliance

System Performance and Scalability



Challenges

- Inconsistent data formats across legacy systems
- Large volumes of historical data
- Data quality issues and inaccuracies

- Complex dependencies

- Steep learning curve for new processes
- Varied technical proficiency among users

- Scope creep
- Unforeseen technical challenges

- Ensuring data protection during migration

- Ensuring the new ERP system can handle increased data and user load
- Maintaining performance across different modules



Mitigation

- Well defined data migration testing strategy
- Use of market leading automated data and ETL testing tools
- Skilled resources
- Well defined data quality processes

- Close collaboration with integration system providers
- Tracking and monitoring of dependencies
- Right testing strategy

- Well documented processes and procedures
- Documentation validation
- Quality control of training material

- Regular monitoring and tracking of project activities
- Regular reporting on quality, schedule and budget metrics
- Ensuring right skillset at right time

- Best practices in place for data migration testing
- Automating the tool while minimizing data exposure
- Data protection and security policies in place

- Right performance and load testing strategy
- Using automated load, performance, and monitoring tools
- Skilled team experienced in performance engineering, providing tuning recommendations

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