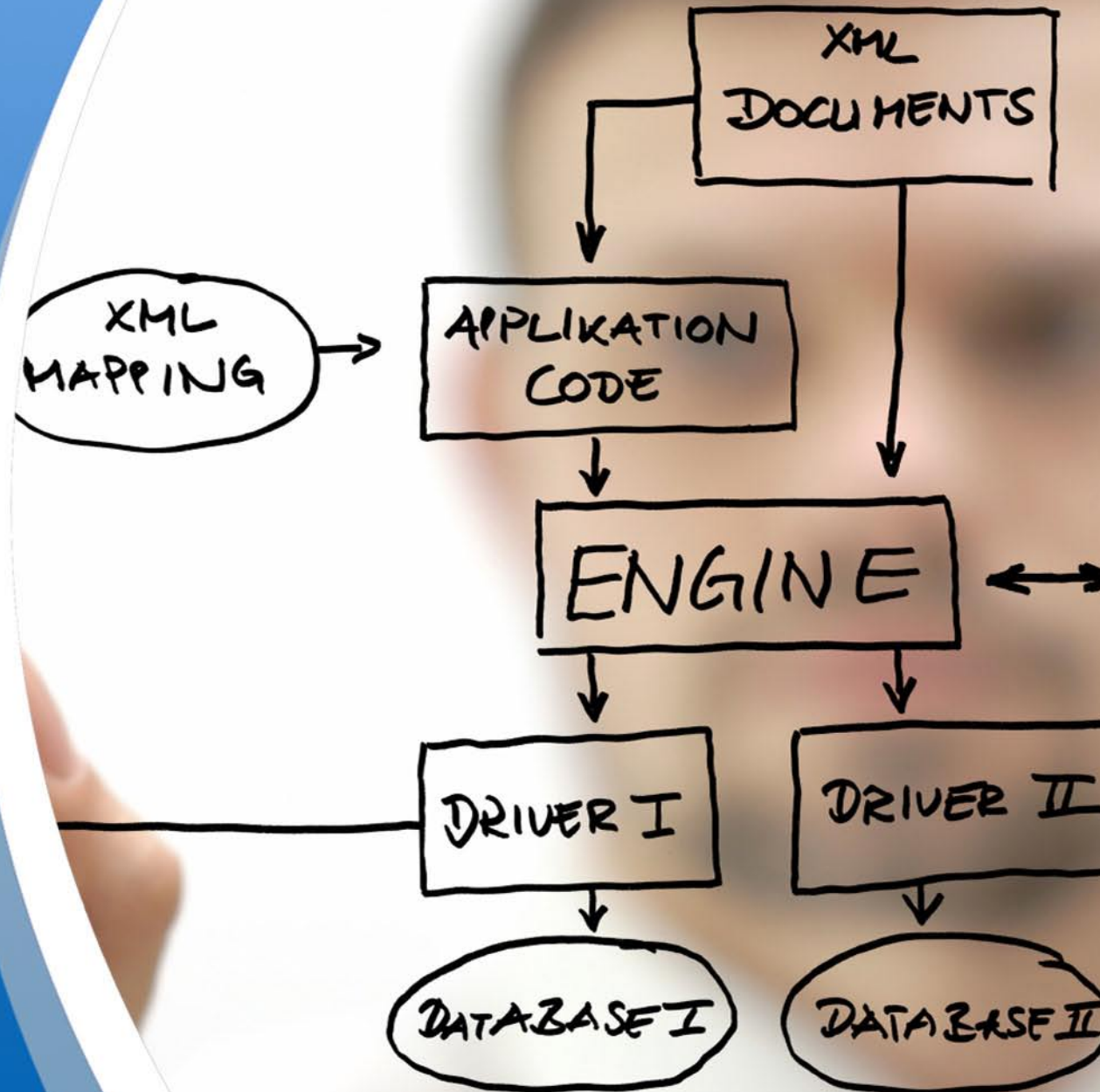# *Case Study*

Offshore Development Migration from PowerBuilder to JAVA Struts

Offshore Development
Migration from PowerBuilder to JAVA Struts

Summary of project

- The legacy application is an in-house development, widely used across the organization
- 'AS IS' migration of the application business functionalities
- Technical redesign of the application: shift from client/server to thin client based n-tier architecture
- GUI migration from PowerBuilder to Java, J2EE, Struts framework

Scope of Work

- Requirement analysis of the existing PowerBuilder application and documenting the use cases.
- R & D related to understanding of Customer's Struts-derived development framework
- High level and Low level design
- Coding, Unit testing, System Testing, Performance Testing, UAT defect fixing
- User documentation, Post go-live support
- End-to-end project management

Organizational model

- The project execution follows an onsite-offshore model where in the design, development and Pre-IST system testing are carried out offshore
- One onsite technical coordinator and architect
- Agile/RUP development methodology is adopted to reduce the development cycle and allow intermediate validation
- Deliveries are divided into sets of Use cases

415K€ / 2 165 mandays

Commitment on fixed price – No change

Agile-based delivery model

**Stringent quality management – No rework**

Challenges

- Readiness and availability of the framework during the development phase
- Version control and synchronization of the framework with the application being developed offshore
- Delays due to unavailability of the business users to provide clarity on the business process re-engineering requirements
- Dependency on the customer team to configure /assemble /build /deploy the application

Project Keys

- ### Facts

140 screens 75 reports	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5 Change Requests
Mandays offshore	200	670	415	600	280
Nb of Use Cases	18	21	43	21	-
Nb of Change Requests	7	13	7	45	-
Nb of Test Cases	200	210	430	780	-
Nb of Iterations	11	8	7	41	-
Iteration feedbacks	All iterations accepted / All criteria passed / No rework				

- ### Iterative development approach with early risk mitigation
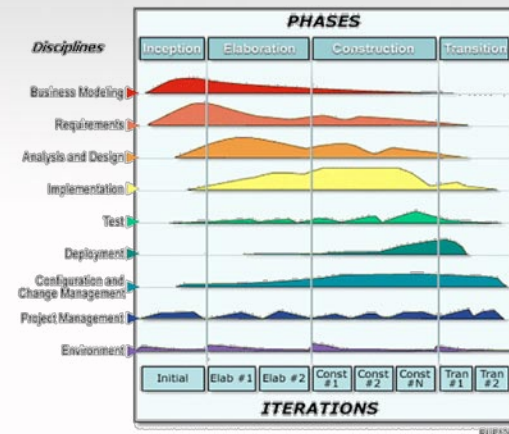
- ### Why it works
  - Onsite coordinator for good communication
  - Detailed technical reviews, "How-to" with onsite architect
  - Preparation, anticipation of changes
  - Fixed price mode keeps everyone on tracks