

Abstract

The client, a Top European Investment bank, headquartered in Germany, with presence in more than fifty countries, worldwide. It provides money transfer facilities to its customers. Money transfer instructions are received through a variety of input vehicles, some of which are standard such as SWIFT, ISO Telex while some are non-standard such as cable, mail and telephone etc. On an average the volume of data that gets processed on a daily basis is about USD 600 billion through 70,000 transactions. The application developed forms a part of a toolbox which repair funds transfer transaction messages that could not be deciphered due to invalid data, non standard formats or multi-payments. The repaired transactions are approved prior to directing them into the fund processing workflow.

Challenges

- Re-engineer and migrate this mission critical application from a VAX / VMS C platform to Windows NT, VC++, and CORBA. The same application later required to be ported on UNIX platform and web enabled using Java, EJB & CORBA.
- Providing a highly reliable global Payment system - an uptime of 24*7 was required for up to 250 users over LAN/WAN from New York and Dublin with a tight window for clearance
- Speed, security, reliability, accuracy of transfer and the timely notification to the appropriate parties were of utmost importance as at any given time 7000 messages are awaiting repair to meet deadlines.

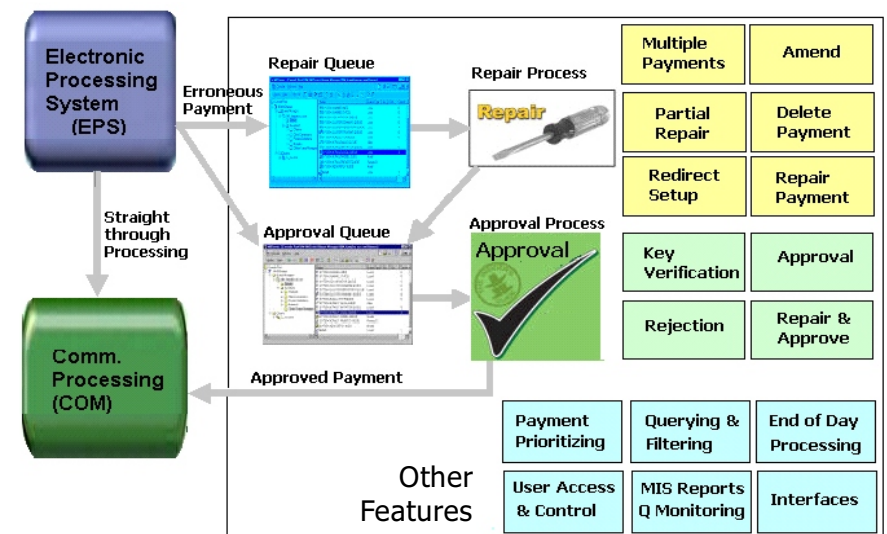
Re-Engineering and migration of mission critical application to save mounting maintenance costs on obsolete platforms

Solution

Keeping all the challenges and the critical nature of the application in mind, initially the system was migrated to a three-tier architecture. The 3-tier architecture involved a backend of Oracle 8i on Sun Solaris, a client of VC++ on NT and middleware of Java / EJB.

The performance and reliability of the system was achieved through rigorous test methodologies. KPIT ensured this by running both correct and invalid data through the system. This testing methodology used over 8000 payment transactions.

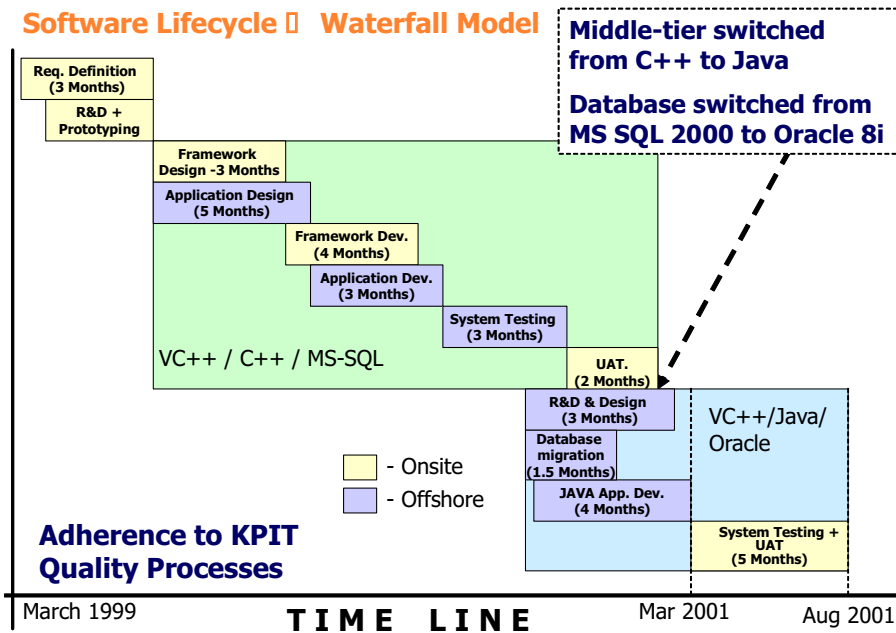
To achieve maintainability and speed of the application the business rule evaluation mechanism were incorporated within the middle tier whereas the business rules were placed in stored procedures.



The Need

- Platform/ Technology Switch → VAX-VMS an unstable platform
- Improving Application Response (Volume Processing)
- Functional Enhancements
- Implementing a uniform security system
- Ease future Maintenance and Support

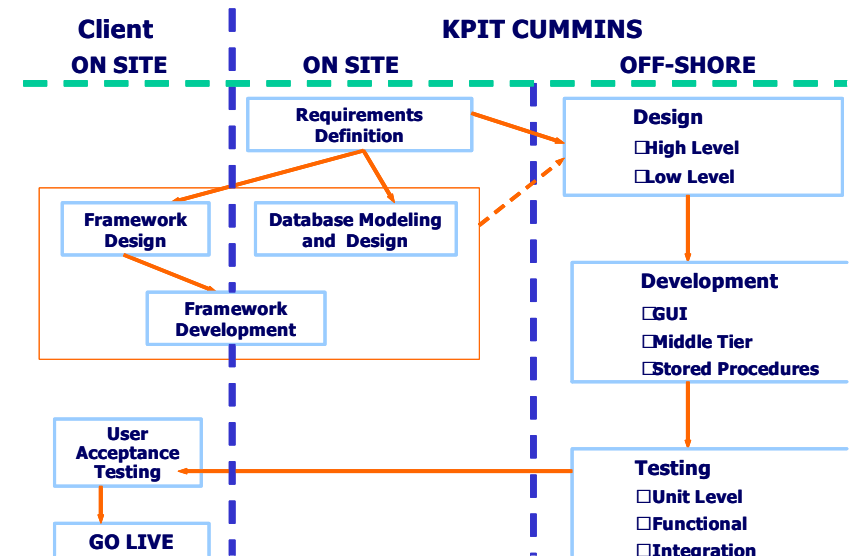
Methodology & Timeline



Tools & Technology mix

- On NT platform
 - Client - MSVC 6.0 on NT
 - Communication between client and middleware through CORBA
- On Unix platform
 - Three tier architecture
 - Middleware - migrated to Java-EJB 1.1 on Sun Solaris-Unix v2.7. WebLogic 5.1 as application server
 - Backend - Oracle 8
 - Communication between middleware and backend through using type 4 thin driver

Engagement Structure - Onsite - Offshore Model



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