Case Study - Implementation of a Membership Services Platform using SOA

The client	TransUnion Interactive (TUI), a full subsidiary of TransUnion, one of the top Credit Scoring companies in the United States
Project Description	TUI develops and markets credit-based products and services that deliver value to both consumers and some of the largest financial institutions worldwide. It has a suite of products and services to help consumers better understand their credit. The requirement was to develop a membership services platform, which would provide credit reporting, scoring and monitoring services to TUI partners on a subscription based model. The requirement also demanded real time interfacing with TUI partners as well as several other business vendors.
Results	**Architecture** Saksoft developed and implemented a Membership Service platform built on SOA, and an application layer with JSP web application based on the JPF [Java Page Flow architecture]. The business layer consists of around 15 discrete service applications, loosely coupled together, which supports TUI business. The service applications followed a request / response communication model implemented using XML and XMLBeans with dynamic binding. **Business Interface** The platform was based on BEA Weblogic integration business process architecture with Weblogic Server 8.1 SP4, deployed in a clustered environment. The service applications were deployed as an EJB with one stateless session bean acting as a session façade, fronting a POJO implementation class. Each app had one interface defined with all the service methods supported by the application. The remote look-up of the service object [EJBObject] was accomplished with the Service Locator in conjunction with the Spring-Framework, which used the dependency injection principle for loading the configuration of all the MSP applications. All EJBObjects [services] were bound to JNDI with a name. **Implementation** Inorder to ensure effective real time processing in a distributed environment, applications that interfaced with various vendors and partners, were identified as services, which were independent of business. The core business functionality was abstracted into a service,

	which resided as a base for the peripheral service applications. As the requirement was to provide credit reports, scores and monitoring to TUI customers, separate service applications were created for each one of them with the core service app communicating to the individual services using a request / response model. The project followed a continuous integration model, in which design and development proceeded simultaneously. To facilitate effective testing, a test driven development approach was adopted with JWS Junit framework, which was developed by Saksoft's team by extending the Junit open source.For each functional implementation a corresponding test case was added to the test harness suite, which was constantly monitored for code sanity and build. The test suites were integrated using Cruise Control, which is an automated integration tool that automatically checks out the code and executes the test, thus making code integration quicker and less error prone.
Current Status	The application is live with 3 partners integrated into the membership model with a combined customer based of more than 2 million. The implementation model has allowed for smooth integration of new partners and has proved to be completely scalable.

For more information or additional case studies, please write to sales@saksoft.com