



Elegant MicroWeb
Delivering the Value of Technology

Case Study

**Software Product Reengineering, Maintenance, Support Services –
Java based Enterprise Product**



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The Client

US based company is a known name for its expertise in providing software products and services to large corporate businesses in USA. With experience of high-end, constraint-driven scheduling, planning, and forecasting software solutions based on Java and other enterprise technologies under its belt, it has been fulfilling the requirements of customers in a variety of verticals like aerospace, banking, defense, insurance and government.

The Objective

The client had a very successful enterprise product with Java based desktop client architecture. The application is being used by large number of users in aerospace, defense, and other business verticals. Thus, it was imperative to migrate and reengineer this application to latest industry standard enterprise architecture for better performance and to improve interoperability with other systems and meet user experience expectations. Application was used by large number of users, and it was important to ensure smooth transition, and several factors like data migration, application upgradation, application user migration, integration migration, user training and continuous availability of application to users during upgradation phase was very important.

The Solution

Elegant MicroWeb technical team worked with client's technical and business team to understand technical and business implications, and derived product road map to reengineer this desktop based product to latest enterprise architecture with seamless user experience. Agile project management methodology and reporting system was employed for effective communication between client's team in USA and Elegant MicroWeb offshore team in India.

The Technology

- Technology/Frameworks : Java/J2EE, Mate Flex, Hibernate, Spring - Spring Security, Spring Transaction, Spring Blaze DS
- Build Tools : Maven, ANT
- QA Tool : FlexUnit
- Project Management Tool : IceScrum
- Back-end : Oracle
- Web-server : Apache Tomcat



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Elegant MicroWeb Role

Elegant MicroWeb's product reengineering and Java development team worked with client's team for design, development, UAT and related phases. A detailed analysis along with technical feasibility and mapping exercise was carried out by team after understanding the client requirements and application IT environment at their customers' sites. It worked closely with client's core technical product team for the roadmap, worked on new architecture, functional improvement, usability improvement and GUI improvement. It was important to create a robust and credible product in least possible time and investment.

New multi-tiered application architecture has three tiers, namely, presentation, middle and persistence. The front-end presentation tier is represented by event-driven **Mate Flex** framework that provides a mechanism for dependency injection to make it easy for different parts of application to capture data and helps build loosely decoupled modules. Middle tier uses **Spring Security** for robust security architecture, **Spring Transaction** for data integrity and consistency and **Spring BlazeDS** for data connectivity. Persistence tier is developed using **Hibernate ORM** framework having interoperability with relational database on Oracle platform.

During the development and reengineering of the product, agile methodology was adopted with the implementation of web based project management tool,



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IceScrum, **Maven** and **ANT** build tools were used to help script rich, complex build processes. Finally, QAT services like manual and automated testing, UAT, automated integration and regression testing were employed before handing over the application to client's team. **FlexUnit** testing tool was used to design and implement automated test cases and scenarios based on industry standard practices.

Conclusion

Keeping in view the client requirements and changing market dynamics, Elegant MicroWeb team worked closely with client's IT and business team with agile approach, and delivered reengineered product within time and budget.

This product reengineering and development experience with client's team has helped build long term trusted partnership with client, and Elegant MicroWeb has continued providing product development, maintenance and support to the client.



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Contact Us

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