



Symphony helps a Hong Kong based software development firm specializing in trade financing technology to overhaul its acquired small-scale Trade and Supply Chain Finance legacy software into highly integrated and enterprise-scale software that will allow banks across Asia to service online global open account supply chain financing.

## The Client

The client is a Hong Kong based, software development firm backed by a team of banking and financial experts. They focus on offering exclusive software services to a leading global bank based out of Hong Kong to develop, support, and implement Trade Finance technology solutions.

## The Challenges

The client had inorganically inherited a small-scale Trade and Supply Chain Finance legacy product and planned to introduce trade-financing technology across Asia with strategic alliance with one of the global banks.

The client's product vision was to scale the base version of the product into enterprise-scale software with powerful integration capability. This would allow banks to service global, open account, supply chain financing by dynamically monitoring online and managing buyer and supplier trade flows, credit exposures, financing and payments through multiple funding sources.

The challenge was to:

- Incorporate various business components within trade and supply chain finance lifecycle
- Seamlessly integrate with external systems (of Banks and Financial institutions)
- Introduce the product early to market

## The Solution

Symphony set up a Global Operations Centre (GOC) with a 25-member experienced team (with flexibility to scale-up on demand). A five-member Symphony team closely worked onsite with the

## End-to-end Product Development

### Platform

Java J2EE

### Industry / Domain

Banking / Financial Services

### Engagement Key Points

- Peak Team Size: 50
- Team composition - Product Manager, Development Manager, DBA (Oracle), QA Manager, Module Lead, QA Lead, Developers and Testers
- SDLC: Agile
- Development Model: Custom MDD Model
- Release cycle – short iteration cycle

### Technology and Tools Used

- Web layer: Spring MVC, JSP 2.0 Tags, JSP, Display Tag, Cewolf (Charting)
- Service Layer: Spring, Acegi Security
- ORM: Hibernate
- Scheduling: Quartz
- Database: Oracle 9i/10g
- Web Server: IBM Websphere, Tomcat
- IBM Middleware : MQ Series / Message broker, Message Transformer Extender
- Configuration management and version control : SVN
- Build automation : Maven
- Continuous build process : Cruise Control
- Unit testing : JUnit
- Test automation : Watij, TestComplete
- IDE : Eclipse
- Project and defect management : ProNav(Digite)

### Major Product Features of the Portal

- On-demand access to working capital funding
- Integrated with banking system and payment gateways
- Implementation of business components like Accounting, Risk Management, Underwriting rules management etc



client's executive team. This team had extensive sessions with the client executive team, and customer support representatives to understand the current base product functionalities, product vision, and product road map.

A steering committee comprising of Director Product Management (client), Director Development (client), Managing Director (client), and Account Manager (Symphony), provided management oversight, reviews, control, and guidance.

As software R&D partner to the client, Symphony's single window solution for end-to-end product development included designing a three-tier, service-oriented web based application using J2EE technologies, Open Source technology stack, and IBM middleware components. Symphony developed the software to manage end-to-end business processes and the requirements of different user groups

- For Banks/Financial Institutions – underwriting and valuation rules (configurable & reusable), various entities, funding, payments, managing risk, anti-money laundering, and user administration
- For Supplier – Invoice & PO, funding requests, shipment and receivable forecast
- For Buyer – PO, invoice payment, shipment and payment forecast

Besides, the Symphony engineering team also added core components like Accounting, Risk management, Underwriting Rules management, Payment processing to strengthen the product functionality. The new product had enhanced integration capability to bank accounts of Supplier and Buyer, fund transfer, payment gateways, Bank's accounting system via exchange relevant information in industry standard format (SWIFT).

## The Benefits

Symphony's technical leadership driven product development achieved the following benefits for the client:

- Helped to maximize ROI on software R&D

- Helped introduce the product early in the market and thereby capitalize on market opportunity
- The product realization with trade financing technology enabled the client to forge a strategic alliance with the global bank to implement online trade-financing across Asia