

Solutions for Financial and Wealth Management

Case Study

The client:

A financial services firm based out of the Capitol Hill area specializing in offering wealth management solutions and investment research designed exclusively for the affluent investors. Company also offers a investment platform in an outsourced model which is used by other advisors to improve their operational efficiency.

The challenge:

client is on the cusp of its next level of organic growth and needs solutions to increase the productivity of their in house staff and also create an infrastructure which would automate their existing operations. client would like to build an IT platform for future needs which should provide them the ability to rapidly deliver initiatives with a faster time to value

Some of the challenges faced by the client were –

1. Manual processes with too many scattered data touch points resulting in less visibility into operations for the management.
2. Unavailability of New and updated information within one business day.
3. Time spent on client and advisor queries coupled with lack of transparency and traceability of all information.
4. No seamless integration of data flowing between systems across firewalls
5. Reducing regulatory, compliance and operational efforts to focus on revenue generating activities.

The solution:

Seneca Global applied its proven **Global delivery model** and assembled a team of professionals in offshore and onshore for solving the client needs. Engagement started with a detailed architectural assessment of the company factoring in both current and future business and IT needs. All important stakeholders from business and IT were interviewed and the requirements/needs were modeled which served as the basis for solution proposals. High level solution proposal consisted of analysis and initiatives which need to be taken over a period of time for the company to reach the desired levels of operational efficiency.

client's internal developers, IT managers, Operational staff and Key clients were participants during this process discovery and high level requirement elicitation exercise. Seneca global employees who had rich financial services domain expertise understood the language of the client and helped in the solution definition by adding industry best practices and creating software models which captured the perspective of function (what the solution is supposed to do) and perspective of the construction (how the solution is being developed). Seneca Global followed up with detailed solution proposals after analyzing the requirement models which ranged from developing new process based applications, which reused the existing IT infrastructure as much as possible. Solution proposals also identified the product level requirements, key architectural patterns which would be applied, technologies used in development and deployment

models which included using cloud based services. Seneca Global briefed all the stake holders and took them into confidence by explaining on how the solutions proposed would contribute in improving the existing processes, lowered the overall TCO, and provided the flexibility needed for bringing new initiatives to realization easily.

The implementation:

First leg of this IT enabled business transformation initiative started with automation of one of the clients strategic offerings in personal wealth management area. The challenge was to implement a web based process centric application which also integrated with their existing systems for data, security and User Interface.

Team:

A Solution Architect and a Domain Specialist formed the onshore team who coordinated with an offshore team consisting of a Delivery Manager, Project Lead, 4 developers with skill sets in various technologies, 2 Quality Assurance Engineers and a UI Designer for layouts and prototypes

Process:

Project used the prominent ICONIX process where the team started by modeling the domain and the relations between them followed by a detailed class model. Each requirement was driven by preparation of User Interface prototypes which then were analyzed and dynamic models such as Use cases, Robustness diagrams and Sequence diagrams were created for the all of the features being offered to the end user from the interface. Each of the dynamic models made use of the underlying domain model for achieving its goal in an iterative manner.

Team followed an agile delivery model, where the current set of requirements were broken down into stories and epics and incremental weekly/fortnightly releases allowed in establishing an easy feedback loop with the client and provided effective validation of the requirements all through the project. Wiki, Email and Telephone were used for collaboration and project management was done using Grass Hopper which follows the agile planning principles.

Technology:

1. Grails as web development framework
2. Groovy as the programming language
3. Web service client for integration with existing systems
4. Quartz scheduler framework for automating cron jobs
5. JQuery, Ajax, CSS and charting frameworks for developing rich and user centric web 2.0 based interfaces
6. Tomcat as the web server
7. Spring Web Security for imposing authorization definitions
8. Deployment was on a cloud infrastructure with Apache web servers providing the initial touch point for the end users with multiple Tomcat servers running in a load balanced mode.

Details:

Application provided the ability for the client and external advisors to create and manage customized wealth management strategies for individual clients. Application should be designed to provide the very latest information about the managers which included current recommendation, yearly returns, back test data to name a few using a graph format where applicable for the user in order to make an informed decision on whether a manager should be part of a particular strategy or not. User interfaces used innovative ways of showing large amounts of financial data using grids which were fully customizable by the user and provided a desktop interaction pattern from the browser.

Application was integrated with external systems to import data according to a schedule. The raw data received from other systems was then processed by this application applying complex number crunching for identifying Std Deviations, cumulative returns for various manager, blended index returns, advisor fee calculations depending on the mix of managers used in creating the strategy, to name a few.

Application was then integrated to be part of the client's existing portal and the look and feel of the application mimicked the portal providing the user a uniform experience throughout the site. Application was designed for multiple tenants with a comprehensive hierarchical role based access control model which allowed fine tuned access to different personas of the application. Single Sign on services from the existing infrastructure were integrated into the application.

The results:

Application has been given thumbs up by the users and the next phase of development which includes process based automation involving human interaction is in the works. Application has transformed an important business process which was mainly run through email and personal interaction into an end to end web enabled self descriptive, customizable, completely integrated with existing infrastructure and fully automated data processing for latest information. It has been a clear winner in generating value very quickly and increased the productivity of the clients operations many fold.

The journey:

The assessment of business needs and current IT enablement in the beginning of the engagement helped Seneca Global understand the requirements in great detail. Seneca Global proposed improvements and offered advisory services all through the engagement which were well appreciated and added value to the product. It was an exercise where Seneca Global worked hand in hand with business at every step, and can be attributed as the key to the success of this engagement.

Seneca Global chose the best of open source technologies in the market today and deployments were done on the cloud which kept the implementation costs to the minimum. Seneca Global had a steep learning curve in building skills in some of the implementation

technologies, which resulted in a nominal delay during the first phase of the project but was quickly resolved as the team got comfortable with the technologies. Implementation of this application needed close association and participation from company personnel and Seneca Global was dependent on them for application data, validation of analytical calculations and integration of the application with the existing systems. The engagement had a strong management mandate from the client and Seneca Global enjoyed the time and support of the key personnel at all phases of the project which has helped us immensely in successful execution of the first leg of this long journey and helped us position Seneca Global to become the IT Partner of choice for the client.