ON DEMAND AGILITY SOLUTIONS

Case Study

Re-engineering puzzle pieces fall into place with ODA's Business Analysis

When a global investment banker envisioned user entitlement and audit control features to upgrade and integrate a credit derivatives application, ODA paved the way for a smooth development experience ensuring total success in the translation of business requirements into comprehensive deliverables

A US-based investment banking group's credit derivatives operations were based on centralized management of uncovered credit risk for all investment trades at a special desk. In addition to hedge trades (to cover the credit risk) the desk was also engaged in some fixed income (Bonds) trading. For its day-to-day operations, the desk was using a hybrid Excel/Java application enabling:

- Trade management (Blotters)
- Market data management
- Static data management (counterparties, risk specifications etc)
- Revaluations and Risk/Hedge calculations
- Customized, summarizable reporting

The following is a case study that presents an overview of the Business Analysis and related documentation prepared by ODA for the Risk Valuation and Trade Management application being used by the global group.

Problem

As operations expanded, concerns in the present system made it mandatory for the group to take a re-look at the application's working specially after an internal compliance audit study revealed that the existing application required enhancements in the areas of security (user entitlement) and audit control.

In its original form, the application was a standalone one where data integrity was maintained externally through version controlled Excel worksheets. This architecture raised concerns from internal auditors on grounds of data security, audit control and scalability. Already, there was a strong business need for the application to be enhanced for system scalability in order to handle growing volume of trades, which was expected to grow further in the future. Systemic interoperability with external systems was not feasible with the original application due to the absence of a central database-based architecture. This lead to dual key-in of trades in other systems, manual input of market data and manual reconciliation.

ODA was engaged in a six-week project to study the current application vis-à-vis the emerging requirements and propose an application architecture that would address the current issues along with a clear plan to implement it. It was totally on the strength of this analysis, that ODA was selected to implement its proposed architecture.

Solution

Initiating the project with total focus on Business Analysis of requirements and needs arising from the limitations of the present system, the ODA team rounded up the first assignment with comprehensive documentation that outlined the Risk Valuation and Trade Management practices being used by the Front and Middle Office users of the client's money management desk. In later stages, the ODA delivery team leveraged this documentation to successfully re-engineer, enhance and implement the solution for the client.

Approach to Business Needs Analysis

The ODA Project Management and Business Analysis team was formed to conduct detailed interviews and discussions with the client's stakeholders and the following high-level business needs were identified:

- Improve the front-end by replacing Excel and providing a new GUI with secure login.
- Improve operational productivity through implementation of a workflow.
- Provide faster and more detailed Management and Executive information reporting capabilities.
- Improve system performance to gain higher productivity.
- Improve monitoring and management of risk through more detailed prediction/attribution analysis.

Approach to Business Requirements Documentation

The ODA Business Analysis team comprising 2 members interacted with the client's front-office and middle-office users over a period of 4 weeks and prepared a detailed Business Requirements Document with the following segmentation:

Current Business Constraints/Needs

The team defined the current constraints/business needs that the project was being initiated to address. The focus was on answering questions such as:

- What can we create, fix or improve?
- What are the drivers for the project (improved process/risk reduction/external mandate etc)?

Business Objectives and Benefits

The team also defined what the project should achieve and what rewards would be realized with this achievement. The benefits included cost reduction, revenue generation opportunities, productivity increases, user experience improvement etc. This analysis flowed directly from the problem/need that was addressed in the previous section.

Success Measurement Metrics

In this section, the team defined how success would be measured and realized. What would be considered as the criteria for measuring success?

For example, it was identified that Risk mitigation would be possible on account of:

- Better control over operations and introduction of a workflow system.
- Enhanced capability for detailed attribution analysis.

The team also established through analysis that revenue generation would increase due to:

- Improved and faster report delivery resulting in a better decision support system.
- Improved productivity due to fast and exhaustive availability of analytics and information

Project Delivery Constraints

The team held discussions with the project stakeholders to identify and document those circumstances and events that could constrain the project and impact the delivery of the solution. E.g., whether the project had to be implemented within a strict time frame or within a specified budget.

Current Business Process Mapping (As-Is Analysis)

In this section of the documentation, the team included a breakdown of processes relevant to the project, both manual and automated, and business groups involved in the current processing. It also included the systems that were currently being used and prepared an illustrative business flow diagram using the Enterprise Architect UMLdesign tool.

Current Business Process Limitations

The team members interviewed the Front and Middle office business users, identified and documented the inefficiencies, limitations and drawbacks of the current environment, and pointed out the opportunities for improvement. Where possible the team used quantitative measurements, e.g., the time to perform revaluation calculations, data persistence, generating reports etc.

Proposed Business Process Analysis (To-Be Analysis)

The team described the high-level requirements of the desired process. The objective was to document the expectations for the new process that was being sought and define the boundary or scope of the project.

List of Impacted Business Groups

The team prepared a list of business groups that were in the scope of the project and also prepared a list of those business groups that faced-off to the Credit Derivatives group but would not be impacted by this process/change. The team also covered the locations and number of users who would be directly impacted by the project.

List of Upstream/Downstream Systems

The team identified a list of upstream/downstream touch point systems that would or would not be impacted due to the new process/change.

Specific and Detailed Business Requirements

This section was the most detailed and covered each specific requirement that would have to be fulfilled for the successful acceptance of the system. It formed the core statement of requirements on which the Functional Requirements Document was later based. Due care was taken to ensure that the requirements were precise, achievable, measurable/testable, realistic and met the business objectives. Each high-level requirement was documented in a separate section, with supporting detailed information required for the preparation of a comprehensive Functional Specification for this project. Data Conversion and Reporting requirements were also specified in detail in the Key Business Requirements.

Performance Requirements

The team documented expected performance criteria including data and transaction volumes, potential growth, availability and scalability of the system etc. It also documented requirements to be met by the new system such as acceptable response time when accessing the new or changed system, screen, report etc.

Exception Handling

In this section, actions to be taken if and when day-to-day system operations failed to deliver the desired result were identified and listed.

Usability Requirements

Usability requirements that the overall solution was required to fulfill including screen requirements and workflow requirements were outlined in this area.

Impact on current SLA

This segment of the document identified whether the new requirements changed the current Service Level Agreement for the application.

Contingency and Disaster Recovery

The team members discussed what contingency requirements the system would essentially have to meet in the event of an extended Outage. The Client had an existing Business Continuity Plan (Policy) that would be put into effect in case of a contingency.

Training Requirements

There were no external training requirements. It was identified that the new application needed to maintain an Excel or Excel-like GUI look and feel so as to minimize the need of hands-on training.

Information Security, Authorization and Access Control

Detailed requirements were identified and documented related to information security. Description of how Authorization and Access control would be performed to protect application data and processes from unauthorized access was documented in detail. Description of audit logging and alerts requirements was also documented.

In addition to all the above sections, the team also interviewed the project's stakeholders to identify and document requirements related to the following issues:

- Regulatory, Audit, and Data Retention Requirements
- Approach to User Acceptance Testing
- Identification of UAT Groups
- Phased Implementation Approach from UAT to Production
- Project Timing Considerations
- Glossary of all Acronyms/Business Terms used in the BRD

Benefits

ODA's analysis and documentations benefited the client in the following ways:

- Clear understanding of business needs, limitations of existing system and expectations from new system.
- Well-defined scope of work and boundaries of the new system.
- Clear understanding of project related risks and identified risk mitigation strategies.
- Precise capturing of requirements leveraged to appropriately help in defining functional specifications as well as QA test cases.
- BRD used by UAT group as a reference document to test successful delivery of all specified requirements and approve the new application.

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About ODA Solutions

On Demand Agility is your unwavering partner in providing Mission Critical IT and Engineering Solutions. We enable businesses to lead market trends with our end-to-end business and technology solutions.

The offered solutions improve process processes and meet industry standards with cutting edge technology.

Partnering with ODA gives our clients access to some of the finest talent in the industry. As a global company with presence in US, Singapore, India and the Philippines, we are equipped to help your business run seamlessly and efficiently.

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