

Cloud Based Price Evaluation Solution

Client is a premier, global player in the Travel Services Industry. They are headquartered in two locations, Paris (France) and Minneapolis, Minnesota (US). They have a network of over 20,000 operators across 3,000 locations in over 141 countries. The Company has system wide revenue of over \$12 billion.

The Vision

The Client was looking for a business and technology consulting partner. They wanted to implement a solution that would replace their existing Microsoft Excel Based PEM (Price Evaluation Model) with SaaS delivered solution. In addition, this web based solution was expected to standardize and automate PEM and generate MIS and BI (Business Intelligence) reports to meet worldwide strategic business goals of the Company.

Application Overview

The PEM which uses the SaaS based delivery model, is accessed by all the global offices of the Company. PEM is a Corporate Travel Proposal Management System. The PEM provides the following capabilities:

- Gives extended functionalities in comparison to the earlier Microsoft Excel Based PEM
- Automates business processes and workflows associated with the RFP process
- Has capacity to manage documents, archive data and manage reporting
- Provides improved data security using a role based user access model
- User specific dashboards are provided
- Reports are generated to review the key performance indicators (KPI)
- Benchmarks prices and costs
- Scalable and a high performance solution

Technologies and Tools

- Presentation Logic: Adobe Flex

- Application Server: Tomcat 7
- Business Logic: Java, Spring 3.0
- Persistent Layer: Hibernate
- Interfacing Layer: Blaze DS
- Data Base: MySQL
- Build Tools: Maven

Challenges and Solutions

- The client was initially using a Microsoft Excel based PEM. Their users were used to interacting with the Excel interface. So, the Web Based PEM had a huge challenge to provide the Client with the same look and feel but provide better performance.
- In addition, new application was expected to provide the users with the ease to navigate and the flexibility to carry out the functions offered by the PEM.

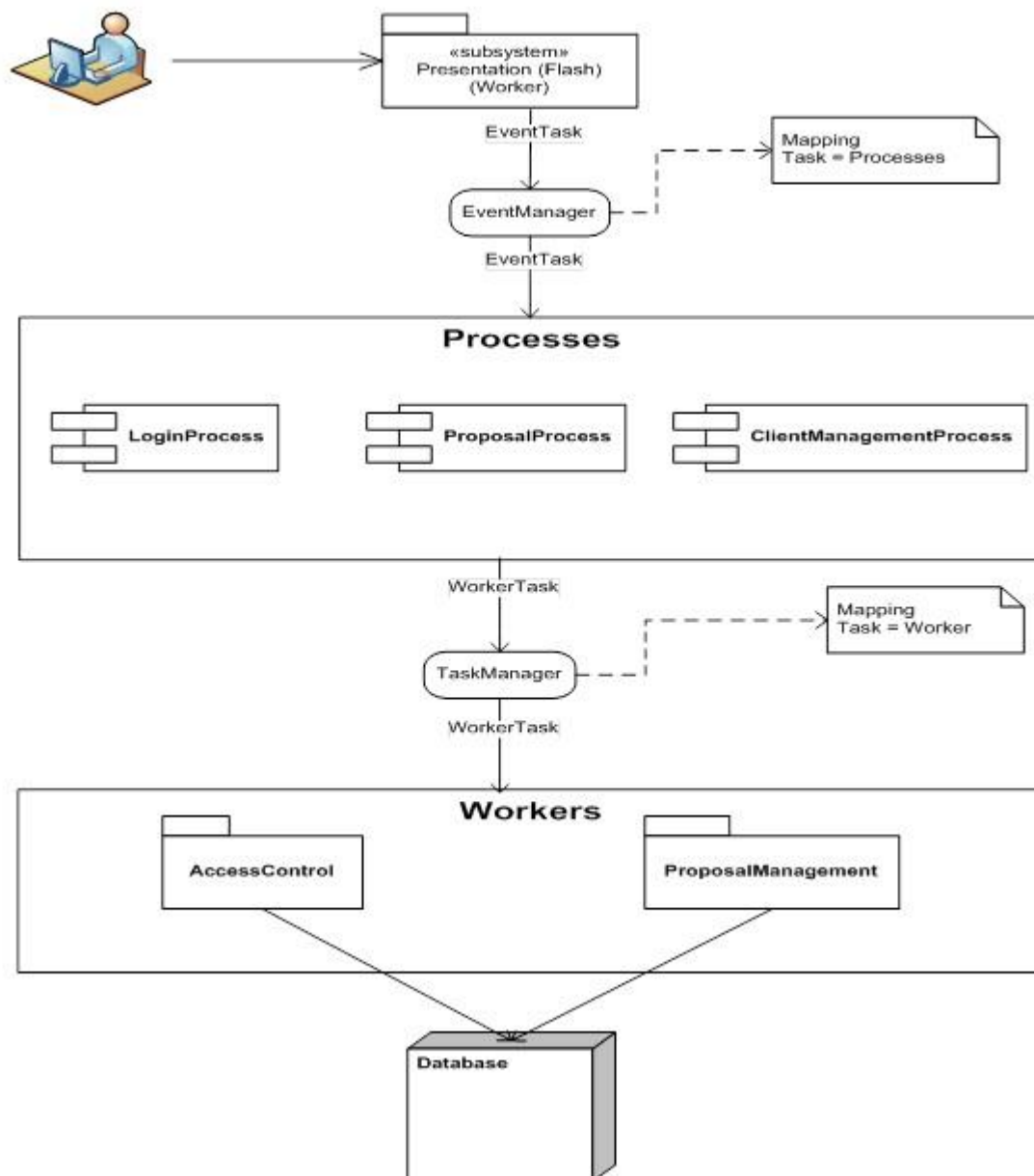
Solution Architecture

The architecture is comprised of processes, events, tasks and workers.

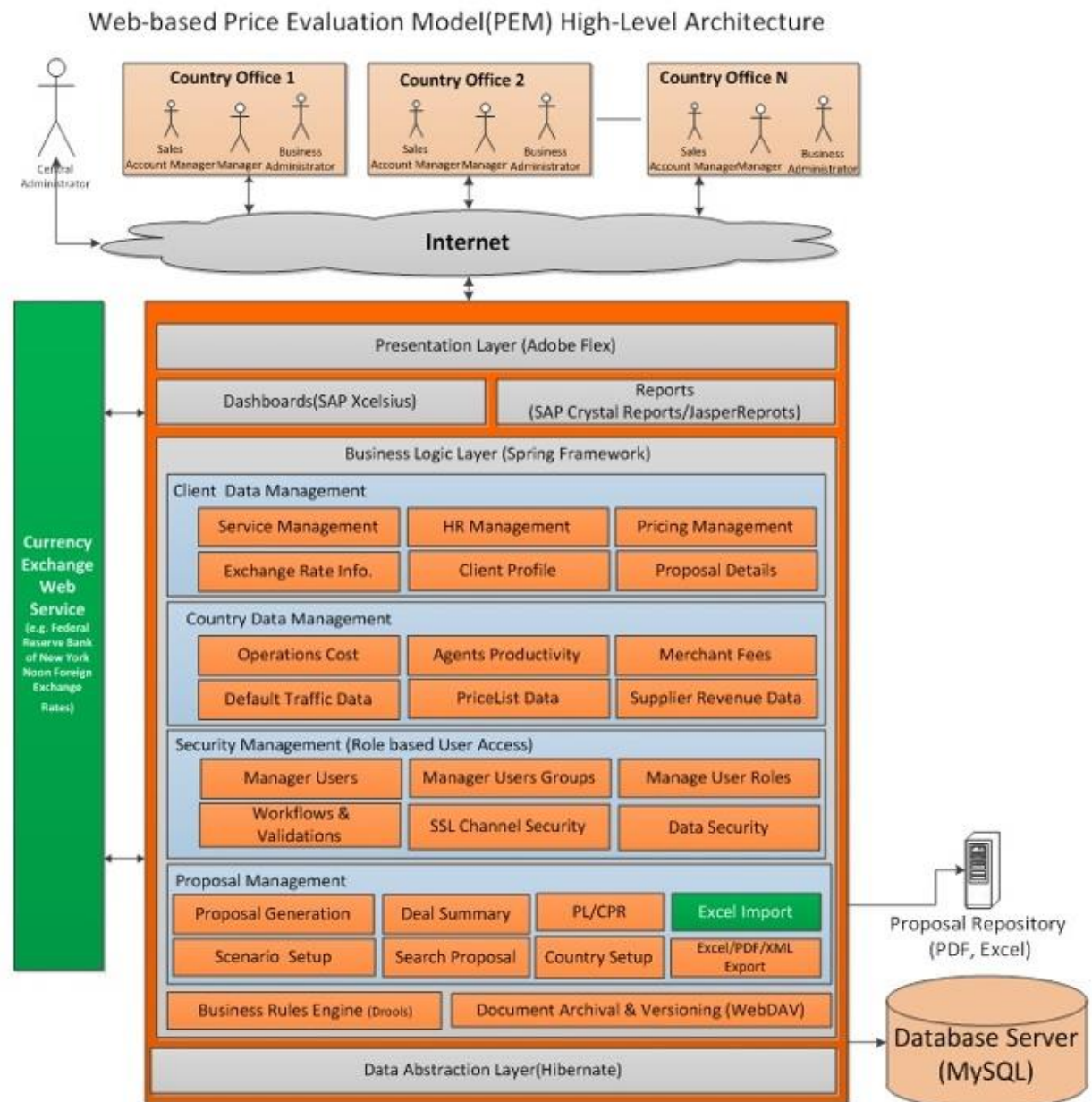
- There are Events that trigger Process
- A process has ordered flow of activities performed by identified workers.
- Worker is a container for related activities. Worker is an independent unit of execution. Workers cannot talk to each other however activities within worker can talk to each other to complete the given task.
- Tasks contains complete information to implement execute that activity. It will contain the Data to be sent – information input objects, it also will contain output object to hold the results back from worker to process. The task may also contain any instruction require to execute the activity.

In EOP architecture, designer at times end up having more number of classes. The worker is a self-contained unit of execution hence sometimes designer probably may think of subunit which could be common for two workers e.g. user entity or formatting unit may be common for both 'access control' as well as 'proposal management' workers however since two workers cannot talk to each other, designer may have these implementations duplicated in both workers. The software design is an art and not mere technology. If the designer uses the design patterns and principles smartly in 90% cases they could actually get rid of this duplication.

The recommended approach to avoid duplication is to increase the scope of the worker.



Solution architecture can be depicted as follows



Technical Breakthroughs

The PEM had to incorporate thousands of fields from the Client's existing Microsoft Excel Based PEM. e-Zest has successfully identified a technological platform which could effectively incorporate these numerous fields.

Business Benefits

This tool PEM is deployed in 20 countries. This tool merges financial rules, processes and terminologies used by the Company globally. The major problems of the Microsoft Excel based PEM were overcome by the SaaS Based Application.

Few benefits are as follows:

- The PEM is easy to maintain and flexible to address the Company's future business needs.
- It helps build consistent pricing proposals for international clients and prospects by addressing the local costing and pricing practices problem.
- It helps maintain the client profiling process which is different for different countries.
- Supplier's Revenue consistency is maintained and properly allocated to the clients.
- The profitability metrics for different countries are taken care of by PEM.
- The regional costing and pricing modules are integrated.
- PEM is standardized across all the global offices of the Company.

Bottom Line

e-Zest with its strong expertise in travel and hospitality domain coupled with business & technology consulting skills provided the Company with a highly cost effective technology solution. PEM as a solution is highly scalable and provides better performance with highest ROI. The PEM team, with its capabilities took lower time to take PEM to the market.