

## **Moving to the cloud using Sales Force**

### **Overview:**

Our client requirements wanted to host certain applications in the cloud. We made the crucial decision to opt for Sales Force since we have the expertise in the development and administrative sections of Sales Force.

### **In Detail:**

**The programming environment:** For development, we have followed the MVC (Model View Controller) pattern using the inbuilt objects given by Sales Force. The Model is implemented using SOQL, SOSL, and Schema Builder. The Controller has been implemented using Apex Classes and Triggers, Apex Scheduling, WSDL to APEX, Batch Apex, and Governor. The Views are implemented using Visual Force, Mobile Visual Force Pages, and Standard Layouts.

For the development, we are using metadata API, Eclipse IDE (Force.com IDE), Currency and Language Management, Managing multiple ORGs (sandbox, Pre – Production, Developer), Customer Portal and Partner Portal, Sales and Service Cloud, Sales force Console Implementation (single window), Sales force CTI implementation (call center)

**The Security challenges & Force Objects:** It has been managed with Roles Based security, User Security, Session Security, IP Based security, Permission Sets objects of Sales Force. Also we are efficiently using the inbuilt standard objects of Sales Force like CRM Objects, Validation Rules.

**The Business process automation:** This is achieved by dealing with the following objects: Work Flows, Outbound Messaging, Tasks Scheduled, Time based work flow, Flows, Complex Approval Process, Chatter Posts, CRON Jobs (apex based timed workflow jobs)

**Reports:** The report has been generated in dashboard with analytical snapshots. This is being done by Dynamic report building and with Custom Reports. For the Data Management with the application, we have used the inbuilt objects of Sales Force for Import & Export, Backup Jobs, Data Loader, Mass Update and Delete.

**Monitoring:** We also implemented the monitoring system to track with Managing Debug Logs, Email Logs, Login History, Monitoring Apex jobs, Time Based Workflow, Outbound Messages, Mass Email, Case Escalation, Entitlement Process, Bulk Data Upload jobs

**External Integration:** The applications in the Sales Force cloud is externally also integrated with Google Apps Integration, Microsoft Office, Outlook, Publishing App to AppExchange. The Sales Force application is integrated with the Commerce Server and Biztalk Server for our client application's data synchronization.

### **Business Challenges Addressed:**

We addressed or solved the following business scenarios with our application development using Sales Force.

1. **Creation of Event-Observer Engine:** This is the model for when an event occurs and actions should take place. Beneficial as it performs critical business needs without the interaction/intervention of a developer
2. **Work Item Engine:** This is to create instances of Services which have work item templates and assign them as Project Work Items for projects. This is an automated model for helping business needs.
3. **ICal invitation:** This module is for creating Ical file which is being used for calendar notifications. Sales Force didn't have an inbuilt feature, hence this module supports to send the calendar invitations.
4. **SMS Module:** This module is responsible for sending sms for different activities.
5. **Data Parsing:** The module is to read specific data from the uploaded doc file which will be used by the application.
6. **Sales force CTI:** This is an Integration of sales force with CTI telephony for customer care center, which enabled easy resolution of issues and increased sales.