

Salesforce.com

A complete Platform

Over the years of IT revolution multiple systems supported by large players in the industry have ventured into the cloud market. Some were successful and others were not.

Salesforce.com was one such platform which saw the light in the year 1999 and since then has not looked back.

Over the years Salesforce.com as a company has evolved and into landed into a position where Forbes magazine calls it as the "Most Innovative Company" for multiple years in a row.

Through multiple product enhancements and strategic acquisitions Salesforce has positioned itself as a market leader in the CRM and Cloud space and offers one of the most complete platform that anyone has seen.

In this article we will look at some of the common expectations of Customers from a application platform and how Salesforce addresses those within the platform.

This article is targeted for the potential customers of Salesforce as well as the technologists who would like to take a glimpse of what Salesforce has to offer in terms of business value and technology.

Let's look at the desired features of an application development platform and how Salesforce matches them in its feature-set:



Back-end Or Data Storage Provision

Cloud based Database which stores metadata instead of Data which is stored in conventional systems. Metadata is segregated into Salesforce Standard, Organization specific and other volatile data.

Always available and always optimized, data can be imported or exported on the fly and can integrate with the existing system. No requirement for data recovery, back-up planning and infrastructure. Pay as you go for data storage making it a tangible system.



Front-end or User Interface

Drag and drop user interface where in you can get new fields or remove existing fields from the screen on the fly. Build custom interface using Visual Force and Apex and override the standard page layouts. Add buttons on standard page layouts and provide functionality to them on the fly.

The administration of the application is extremely user friendly because the UI for the

end users is same as the administrators. Everyone sees just a different version based on the access specified in the profile and role hierarchy.



Business Logic Engine

Salesforce has an inbuilt business processing engine which does most of the processing on its own. On top of that it provides lots of robust validation processes, workflow automations, automated record assignment, segregation of records based on the territory and role hierarchy which the administrators can configure on the fly. This does not require a specialized knowledge and can be done with some experience and learning.

You can create objects, fields, page layouts, record types, validation rules, workflow rules and other host of configurations on the fly using point and click configuration tools provided by Salesforce.com.

And if anything requires a custom logic to be built Salesforce has provided custom development platform Force.com which could be used to develop custom UI, business automation logic using its Apex and Visualforce components.



Security Model Implementation

Salesforce.com has defined multiple levels of security protocols for different security needs. You can define who can login to the system, during which hours and from which IP address. You can define a standard password policy across the organization and define a different authentication provider if someone wants to login using their existing social networking or network access credentials.

By configuring profiles, roles, public groups, permission sets and sharing rules etc. you can define who can see which object, field, record, custom developed pieces etc.



Hardware & Application Server

This is where the beauty of cloud comes into picture where you don't have to manage any application server, kill sessions, refresh pools and maintain hardware to support elasticity of the application based on user traffic. You don't have to manage any hardware, network, memory or storage stacks.

Salesforce.com does all that for you. All the users and the administrators need is a computer with internet connection and a browser to access Salesforce.com.



Platform Upgrades

This is usually a nightmare for the system administrators of other systems where they realize that the system is left broken with a platform upgrade and that is one reason why the administrators continue to use the old version of the platform for years and do not utilize the power of the newer features and enhancements available in the platform.

Salesforce on the other hand promotes the use of new features with regular platform upgrades as part of its three releases in a year. Salesforce is backward compatible and your existing developments will continue to work till the time Salesforce stops

supporting those features. You will always have enough advance notice to upgrade your system.

Release upgrades are updated automatically in the system without impacting the current system of the customer. There are also regular updates which can be activated on the fly by an administrator. After a stipulated time if the administrator does not activate those features they are automatically activated by Salesforce.

This ensure that the customers always have the latest features available in their system for use depending on the feature licenses they have.



Custom Development Platform

As a general guideline you can complete the 60% of Salesforce implementation by using point and click Configuration supported by Salesforce.com and for the rest 40% of the tricky business scenarios Salesforce.com provides a seasoned Force.com platform. This can vary for different organizations.

It is supported by a fully object oriented programming language - Apex, a complete UI framework - Visualforce, an effective database query/search language - SOQL and SOSL.

Using the above mentioned tools you can develop Apex Triggers for automating the system based on various record CRUD events. You can develop custom web pages which can be hosted in Salesforce.com or can be hosted on an external website using Salesforce sites.

Along with that you can develop Batch processes, Web Services, Email Services and other host of features on the Force.com platform. Remember that any Apex code you write in the system has to be supported with 75% of test coverage before it can be moved to production.



System Upgrades

Business processes of any organization does not remain same and it is inevitable to not change the system. Changing the production system on the fly can have a major setback to the business if anything goes wrong. To overcome that Salesforce.com provides Sandbox environments which can be created as an exact replica of production with data and configuration or just with the configuration depending on what you have procured. All the enhancements to the system can be done on the sandbox and deployed to production environment. We'll look more about the deployments in the following section.



Deployments

Deployment is the process of moving any development features from a Sandbox to Production. Salesforce provides couple of different mechanisms to support deployments.

Salesforce.com supports an Eclipse plugin which supports force.com development. Same can be used to deploy custom code and configuration from sandbox to production.

You can also write Ant scripts to deploy something on Salesforce.

The most exciting method is using change sets supported in Salesforce.com itself. You can configure target organizations by setting the right inbound and outbound links between different sandboxes and production. Add the components you want to include in the deployment to the change set by iterating through different types of change set component types. Once the change set is ready for deployment add the profiles which should also be configured for the changes and upload to the production environment.

Once uploaded login to production environment, select the change set, validate and deploy. All by clicking buttons. Easy!!!

Salesforce enforces a strong Test Coverage for all apex code that you write and you must have at least 75% code covered by the test classes which ensures the first level of sanity check that the code is working as expected.



Integration options with third party systems

In today's scenario no system can work independently no matter how robust and complete it is and Salesforce understands that.

Salesforce has provided API support using which third parties can integrate with Salesforce. You can also integrate your Salesforce Org with multiple systems with the help of cross platform web services and various ETL tools like Informatica, Mulesoft, Jitterbit, Cast Iron etc.

The integration can be active or passive, real time or periodic but if the third party system provides an interface it can be integrated with Salesforce.

The integration is always secured any login credentials/security token based.

Of course, there are some governor limits applied for the API usage to ensure every organization on Salesforce gets a fair share of resources.



Data Import and Export

Salesforce.com supports lots of methods using which we can Import or Export the data into the system or from the system respectively.

Data loader, Import wizard and Data export service are some examples of these services. Flat files/CSV format is best suited for these operations.

Along with that many ETL players like Informatica, Jitterbit, Mulesoft etc. Have come up with the connectors for Salesforce which ensure seamless flow of data in or out of the system.

All you need to do is map the fields right between the source and target and do the necessary transformation.



Ease of Application administration

Being a Cloud based system Salesforce provides an excellent administration experience. The UI for the Admin and a general user is similar and the access changes based on the

login credentials and profile. Create a Developer org and explore more to experience the rich features of Salesforce administration.



Mobile Support

Salesforce1 has changed the way world looks at the portability of Salesforce.com. Now whether it's your sales team or your service team all of them can collaborate, update and get data on the fly by using the power of Salesforce1 platform.

The time is gone when you needed specialized mobile developers for making an application available on a mobile device. With its point and click features you can expose the required features of your Salesforce org in no time.

With various actions and workflows enabled in the Salesforce1 instance you can possibly do anything on your mobile device without sitting in front of your computer.



Exposing the Application to the Outside world

Not only the Data, you can also expose functionality and UI built on Salesforce platform to the outside world. The applications will be hosted on a third part server (or accessed through a URL) but will be executed on Salesforce.com servers. This helps in building closely integrated systems with much lower cost as you don't have to login to Salesforce instance and consume a license.

Both authenticated and public versions are supported.

Couple of tools that can be used to achieve this are Salesforce Sites, Site.com and Salesforce communities.



Recovery and Data Protection

Explore more about this @ https://developer.salesforce.com/page/Protecting_Your_Data_in_the_Cloud



Service Availability

Cloud based service, always available, never witnessed any unscheduled outage of service, always fast, always optimized. Thanks to the investment made on the infrastructure that powers millions of users across the globe ad the same time.

Explore more about the Service availability @ <https://trust.salesforce.com/trust/status/>



Cost to the Customers

Explore more about this @ <http://www.salesforce.com/in/crm/editions-pricing.jsp>