Integration Best Practices: Salesforce CRM and Finance

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Do your employees spend significant time re-entering and maintaining customer and order information in multiple systems? Are order details such as requested products or services, pricing, and quantities frequently incorrect? Is there confusion around a customer's status or financial standing? Would sales and support benefit from having a single dashboard of complete customer data to answer status and billing inquiries from customers?

If you answered "yes" to any or all of the above questions, you may want to consider integrating Salesforce CRM and your financial application. The advantages of automating business processes between Sales, Support, and Finance are significant and businesses have reported the benefits below, following a successful integration project:

- Accelerate and track the complete order-to-cash lifecycle
- Reduce first-call resolution time and accelerate collections efforts by providing sales and service representatives visibility into customers financial history
- Leverage Salesforce's reporting and forecasting capabilities to drive business intelligence
- Eliminate manual double entry of customer and transaction information
- Increase accuracy and freshness of data
- Achieve a “360 degree view” of the customer

Sales and finance are mission critical business functions for companies of all sizes, from small businesses to enterprises. Although finance applications range in features and functionality from QuickBooks to SAP to homegrown systems, the general business work flows and resulting integration requirements are very similar. The best practices described in this paper result from lessons learned over hundreds of successful integrations of Salesforce and best-of-breed financial applications. This document describes the common integration touch points and recommended best practices for integrating Salesforce with a financial application.

Overview

The main objective of the integration is to provide financial visibility throughout the organization and eliminate error-prone, manual data entry. This is achieved by integrating transactional data between Salesforce and the finance application. To support this effort, several dependent master data records must be integrated as well, most notably customers and products.

The integration will keep both applications in sync so users can be confident they are working with accurate and current information. As new Accounts and new Opportunities are entered and won in Salesforce, that information should flow automatically to the finance application in a timely fashion. Then as transactions related to those Accounts and Opportunities are created in the finance application, they should be synced back to Salesforce to update relevant information and provide a financial history for the Account and/or Opportunity. In general, whenever a customer or transaction record is modified in one application, those changes should be synced to the other application.

It should be stated that the goal of the integration is not to build an entire finance system in Salesforce and replicate all its accounting business logic and work flow. It is easy to get carried away with the customization Salesforce provides related to work flows, validations, and triggers. It is best to leave the accounting to the financial application, and synchronize the results back to Salesforce for informational and reporting purposes.

**Recommended Integration Touch Points**

To support the goals of the integration, we recommend the following touch points between Salesforce and finance. Each interface is described in more detail in the next section.

- Customers and Contacts
- Products
- Won Opportunities
- Financial Transactions

**Integration Touch Points**

The sections below describe the general flow, best practices, and other design considerations for each integration touch point. For the purposes of discussion, this document assumes Salesforce is the origin for new Account and new Opportunity records, however that is not always the case. For a variety of reasons, some businesses operate by entering new customers and orders directly into the finance application. That's OK. You can still benefit from the integration by syncing those customers and transactions back to Salesforce as net-new Accounts and Opportunities, and taking advantage of the reporting and forecasting capabilities that Salesforce offers.
Additional Notes

- The integration should run automatically "behind the scenes" according to a flexible schedule.
- Errors that may occur during the integration should be logged to a centralized, always-accessible console and sent immediately to administrators for investigation via email or other communication method such as RSS.

Customers and Contacts

Knowing who your customers are is an obvious business necessity, yet managing that list between two different applications can be a challenge. Manually maintaining customers status and contact information to ensure that data is accurate, current, and in sync across multiple applications can be a tedious and error-prone task. Ensuring a consistent customer list in both applications is a prerequisite to transaction integration.

Integration Recommendations

As previously mentioned, consumers of SaaS are looking increasingly to ISVs to handle the integration requirements as part of its SaaS offering. This is a major trend in the SaaS industry today and many leading ISVs are already beginning to offer pre-integrated solutions to their customers. The ability to purchase pre-built integration that is bundled with the application will be by far the most popular option for the majority of your clients. It will also give you significant value-add and competitive differentiation in the marketplace. Your IaaS platform should allow you to build and embed common integration processes within your application while allowing non-technical end users to customize those integrations to meet their specific needs.

1. Sync only “real” customers - Because finance applications are typically only concerned about closed deals, we recommend only syncing Accounts that have actually done business with your company. This is commonly defined as having at least one closed/won Opportunity associated. Leads and Accounts without a closed/won Opportunity (a.k.a. prospects) should not be synced to the finance application.

2. Sync both ways - Changes to Salesforce Accounts should be synced to the finance application and changes to finance application customers should be synced to Salesforce. However keep in mind you do not have to sync every field in both directions. For example, some clients do not want critical billing information such as bill-to address, terms, billing contact info, payment method, etc. to be overwritten by data entered by the sales team in Salesforce. In these situations, those fields should simply be ignored by the Salesforce-to-finance sync.

3. Swap IDs - Use custom fields flagged as “External IDs” in Salesforce and in the finance application (if available) to capture the other system’s ID and “link” the records. This greatly simplifies and improves the performance of subsequent updates to those records because you can determine if the record exists in the other system by simply checking whether that field is populated or not.

4. Only sync what has changed - For performance reasons, the integration should extract records incrementally to avoid syncing every record every time. This is most commonly done by only selecting records whose “last modified date” field has been updated since the last time the integration ran successfully. Alternatively, with a little more work on the Salesforce and/or finance application sides, you could use a custom “integration status” field to identify which records should be synced based on specific business requirements. For example, maybe customer records only be updated back to Salesforce if the billing status changes vs. an update to some finance-only field like terms or preferred payment method. The integration would then reset that status field for each record it successfully synced.

5. Sync Primary Contacts - It is common for Salesforce to have numerous contacts for managing different aspects the relationship with a given Account. Many finance applications and teams may only care about the primary or billing contact. In this case the integration should only extract the primary Contact record for a given Account. In Salesforce, the primary or billing Contact is typically denoted via the AccountContactRole object with a specific role or by some custom field on the Contact object. As mentioned above, the billing contact information is something that finance teams may not want overwritten by changes made in Salesforce, and consequently it is common for the contact information to be synced when initially creating the customer in the finance application but then ignored during subsequent updates. Alternatively, finance teams may want to completely manage the billing contact information within the finance application. In this case, you would only sync contact information from the financial application to Salesforce, if at all.
Additional Notes

If you have customer records existing in both systems prior to the integration, there are additional data migration and matching considerations:

1. As with any integration project, you must consider data cleansing to resolve duplicates, naming inconsistencies, etc. to prevent the proliferation of “bad” data.

2. There will need to be some kind of one-time global matching exercise to “link” the existing records (e.g. swap IDs). This could be done formally as part of the integration development or informally using utilities like Apex Data Loader and Excel.

3. If it is necessary to link existing records, think carefully about how you will match like records: by Name, by email address, by some proprietary Account Number or Customer ID, and/or more sophisticated “fuzzy logic” techniques matching on things like name/phone/address.

Products

The product or item catalog is another master data object that should be kept in sync across the two applications. This allows for Opportunity and finance transaction details to integrate properly.

Integration Recommendations

1. Choose a system of record - It is best to choose one application to be the system of record and sync products only one direction. If the finance application is closely tied to fulfillment of products and services, let it be the system of record. If your product catalog changes frequently and the finance application is not closely tied to fulfillment, consider using Salesforce as the system of record for ease of use. However in general, because of the complexities around general ledger distributions, inventories, taxes, etc., we recommend using the financial application as the system of record.

2. Taxes - To avoid complexity, simply let the finance application handle taxes and sync only the list or sales price.

3. Multiple price books - If your product catalog has multiple price books or schedules, the integration should maintain those lists and create multiple Pricebooks and accompanying Pricebook Entries in Salesforce.

4. Swap IDs - Use custom fields flagged as “External IDs” in Salesforce and in the finance application (if available) to capture the other system’s ID and “link” the records. This greatly simplifies and improves the performance of subsequent updates to those records because you can determine if the record exists in the other system by simply checking whether that field is populated or not.

Additional Notes

If you have product records existing in both systems prior to the integration, there are additional data migration and matching considerations:

1. As with any integration project, you must consider data cleansing to resolve duplicates, naming inconsistencies, etc. to prevent the proliferation of “bad” data.

2. There will need to be some kind of one-time global matching exercise to “link” the existing records (e.g. swap IDs). This could be done formally as part of the integration development or informally using utilities like Apex Data Loader and Excel.

3. Matching items should be considerably easier than matching customers because there will typically be a common Item Number/Product Code/SKU value to match.

Won Opportunities

Syncing Opportunities is at the core of the overall integration. Automatically transferring order information when a new Opportunity closes greatly accelerates billing and collection efforts and improves accuracy and timeliness of financial cash flow reports.

Integration Recommendation

1. Only closed/won Opportunities - The finance application is typically only concerned about actual deals, so only Opportunities in a closed/won Stage should be synced.

2. Sales Order or Invoice? - An important decision to make is what type of transaction in the finance application should the Opportunity sync create. Most often this will be a sales order or invoice depending on your sales model, although we have seen Opportunities synced to estimates and even credit memos. If the sales model is static, the transaction type can be predefined in the integration, but if it can vary between Opportunities you will need to devise a way to determine which transaction type should be created per record. The simplest way to achieve this is to add a custom picklist field on the Opportunity and let the sales rep select the type. Alternatively, the integration could perform a more sophisticated determination based on other various attributes of the Opportunity.

3. Do not forget the Products - Most financial applications require at least one transaction detail line. This is usually mapped straight from the Opportunity Product records.
(Note: for convenience there is a “HasOpportunityLines” field on the Opportunity header to use when querying records.) However if Opportunity Products are not enabled in your Salesforce organization, you will need to fabricate the line item information. This can be as simple as “hard coding” a static product in the integration itself (e.g. always map to item “Consulting Services”) or using custom fields on the Opportunity header for the end user to enter or select the Product-related information.

4. **Swap IDs** - Use custom fields flagged as “External IDs” in Salesforce and in the finance application (if available) to capture the other system’s ID and ‘link’ the records. This greatly simplifies and improves the performance of subsequent updates to those records because you can determine if the record exists in the other system by simply checking whether that field is populated or not.

5. **Order-specific addresses** - If the bill-to or ship-to information for a given Account varies from Opportunity to Opportunity, you will need to devise a way to capture that information on the Opportunity because it cannot be gleaned from the associated Account record. The most common approaches are either to create custom bill-to and ship-to custom fields on the Opportunity object itself, or make use of the OpportunityContactRole object and include the address information on a Contact record. The custom field approach is often more straightforward for end users.

6. **Syncing changes** - Subsequent changes to the Opportunity or Opportunity Products can be synced to the financial application but only until the transaction has been invoiced in the financial application. Once invoiced, changes should not be synced to the financial system to avoid a discrepancy between what may have been sent to the customer and what is currently in the application. Ideally, this should be enforced in Salesforce via field and page layout permissions for end users. Note: if the Opportunity was initially synced as an invoice, no changes would ever be possible. If a transaction did need to be modified after it was invoiced, it is common to have a manual remediation process for the finance team to “back out” or delete the transaction and then resync the Opportunity.

**Finance Transactions**

The final step in the integration is to close the loop and report the relevant finance transactions such as invoices, payments, and credit memos back to Salesforce. This gives sales and service reps a complete picture of the Opportunity’s lifecycle and the Account’s financial standing.

Note: Because Salesforce CRM does not include standard objects for things like invoices and payments, you will need to create custom objects for each record type you wish to sync to Salesforce.

**Integration Recommendation**

1. **Invoices** - Finance invoice records should be synced back to Salesforce. Create a custom object to capture information from the financial system including invoice number, invoice date, and amount. Depending on the level of detail you wish to make available to Salesforce users and reporting, the invoice detail line information can be synced as well by creating another custom object as a child of the invoice object.

2. **Link invoices back to the Opportunity** - Invoices synced to Salesforce should reference the original Opportunity record (via a Lookup relationship), to allow end users to easily navigate between the records. If your business operations include partial or consolidated billing (meaning there could be multiple invoices for a single Opportunity, or multiple Opportunities billed on a single invoice), you can configure a many-to-many relationship in Salesforce using an “intersecting” custom object that has Lookup relationships with both the Opportunity and Invoice objects.

3. **Other transaction types** - For maximum transparency into a customer’s financial history, sync the other relevant finance transaction types into their own custom objects. These transactions should be linked to either the Salesforce invoice or Opportunity, depending on their specific relationship. If your Salesforce users do not need to see details for every transaction type, you could choose to simply update the invoice record directly. For example, when a payment or credit memo is applied to an invoice, instead of creating another custom record in Salesforce, simply update the invoice’s outstanding balance.

4. **One way only** - Finance transactions should be entered in the financial application by the accounting team, not in Salesforce. As invoices are sent, payments are received, and refunds are credited, those records should be synced to Salesforce for informational and reporting purposes. There are many accounting calculations and business rules that happen in the background for these transactions and to replicate those in Salesforce would be overkill. Again, let the financial application do the accounting and Salesforce do the reporting.
5. **Missing Opportunities** - If invoices are created in the financial application that do not correspond to any Opportunity in Salesforce, the integration can create a new Opportunity for that invoice. This is often desirable for reporting and forecasting perspectives.

**Sample Workflow**
A typical workflow between Salesforce and finance looks like this:

1. A new customer Account is created or converted from a Lead in Salesforce. (Note the Account will not be synced to finance until it has a closed/won Opportunity associated.)
2. A new Opportunity is created for that Account.
3. The Opportunity is updated to a closed/won Stage.
4. The Account and Opportunity information is then synced to finance: a new customer record is created along with a new sales transaction or invoice.
5. If the Opportunity or sales transaction is modified, those changes are synced to the other system up until the point the transaction is invoiced.
6. Once invoiced in finance, the invoice information is sent back to Salesforce, linked it to the original Opportunity.
7. As payments, credit memos, or refunds are applied to that invoice, a summary of those transactions is captured in Salesforce. The Salesforce Invoice’s outstanding balance is modified accordingly.

**About Boomi**
Boomi is the market-leading provider of on-demand integration technology and the creator of AtomSphere®, the industry’s #1 Integration Cloud™. AtomSphere connects providers and consumers of SaaS and on-premise applications via a pure SaaS integration platform that does not require software or appliances. ISVs and businesses alike benefit by connecting to the industry’s largest network of SaaS, PaaS, on-premise and cloud computing environments in a seamless and fully self-service model. Leading SaaS companies continue to rely on AtomSphere to accelerate time to market, increase sales, and eliminate the headaches associated with integration. Recent Boomi awards include the SIIA CODiE for Best On-Demand Platform; the AlwaysOn East 100; the AlwaysOn Global 250; and the JMP Securities Hot 100.

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