Today, companies combine Salesforce cloud solutions with their ERP application to unlock, un-silo and unify their business data – and to empower their organization with new, more scalable, automated and connected capabilities.

Integrating with ERPs often is difficult, however. Every ERP is different in many critical ways, particularly how data is organized, managed and accessed. And it’s a fact that incomplete or flawed integration is the No. 1 reason digital transformation initiatives fail.

At ForeFront, experience teaches us that successful ERP + Salesforce integration is about asking the right questions, utilizing a highly structured methodology, applying best practices, and, perhaps most important, understanding that integration is not only about the data but also about the functions that use it.

We asked our expert Salesforce integration consultants to give us their thoughts on integration – and provide examples of the challenges they face in connecting to, and enhancing the capabilities of, ERPs from NetSuite and SAP to industry-specific solutions. And this is what they told us:

**01 CHALLENGE:** Getting clients to understand that integration is not only about data and field-mapping

Many organizations, and their IT groups in particular, think of integration as primarily a data task. And there is this myth that all you have to do is map the data fields. In fact, it’s a much broader task focused on business processes.

**SOLUTION:** Focus on the big picture (and do detailed planning).

It’s critical to know the use cases, understand how your processes are handled now, determine how your processes will be managed in the future, and identify which new capabilities your organization needs. And it’s important to know exactly how the functions – sales, service and field service, for example – will be re-engineered and optimized by the addition of the Salesforce Cloud.

To put it another way, functionality defines and determines integration. And, while the data is important, function planning is key.

Methodology is important too. At ForeFront, we determine the integration points based on the business processes. And it’s necessary to home in on the business functions that will be expanded, enhanced or added. Planning starts with a conceptual discussion about the vision and the goals, then moves ahead with a close look at the business processes involved. Next, the required integrations are determined. And finally, the integration rollout is determined and agreed to by all stakeholders.
**02 CHALLENGE:** Having the right team members on the project

We’ve walked into many project kick-off meetings where everyone in the room is an IT manager. Which, frankly, is a recipe for failure.

**SOLUTION:** Build a team from across the organization

Salesforce projects are not just IT projects: They’re business projects that require knowledgeable, experienced resources from across your organization. Which is not to say that IT resources do not provide critical insight into the ERP, how it was set up, how it was customized, and how it works. But it’s essential to include the insight and knowledge of people in the business who know the processes they use every day, people who understand the functionality required for high performance.

---

**03 CHALLENGE:** Understanding data structures

Every ERP handles, organizes and delivers data differently. Some use unique structures. Some manage it in multiple locations inside the application. Some make it nearly impossible to map to. And, what’s more, auxiliary functions like pick lists and lookups pull data from multiple tables, which must be identified. No ERP has perfect, integration-ready data.

**SOLUTION:** Utilize a structured methodology and ask questions

Our consultants work hard to develop a deep understanding of your data, no matter how complex or confusing it may be. Here’s how: We utilize our detailed blueprints to ask dozens of critical questions about each process, each function and each category of data.

---

**Salesforce Expertise**

- Salesforce manufacturing cloud
- Salesforce revenue cloud
- Salesforce service cloud
- Salesforce CPQ
- Salesforce commerce cloud
- Salesforce field service

**Integration Expertise**

- MuleSoft
- boomi
- Informatica

**ERP Expertise**

- Infor
- Microsoft Dynamics 365
- SAP
- NetSuite
- Oracle
- Epicor
**04 CHALLENGE: Setting a realistic project timeline**

Clients often are in a hurry to get to done. But the goal of every project is success. How quickly we get your new solution live is not the most important consideration.

There are no shortcuts. For example, some companies try to save time by inserting data from Salesforce directly into their ERP's back-end tables. But, by bypassing the application that sits atop those tables – and sidestepping the normalization and validation processes – the result is a mess. Stored procedures break, incorrect info is distributed to other tables, and bad data is propagated throughout the system.

**SOLUTION: Use a crawl, walk, run approach**

All the information flowing in and out of Salesforce must be right. To achieve a two-way flow of accurate, complete and current data, a methodical, meticulous approach is required.

We start with one-way integrations from the ERP (Products, Pricing, Accounts and Contacts) then move on to processes that eliminate manual processes and double data entry. Then we use the insight and knowledge we’ve gained on the ERP's structure and data streams to properly structure and sequence the more complex integrations. Simply put, complex integrations take time to do correctly.

**05 CHALLENGE: Accommodating historical data**

Virtually every project starts with the client saying they want to retain all their Sales data from the last five years. And sometimes they want to maintain access to 10 years of data.

This seems reasonable until the client understands that Sales data includes dozens of datapoints and sources, and that every product sold over the desired timeframe will need to be active in Salesforce during the migration. Plus, ancient Sales data inevitably will contain inaccurate and out-of-date data, old connections, inactive products and long-gone customers and salespeople. And worse, at some companies the data will be in spreadsheets.

**SOLUTION: Explain the pitfalls of retaining old data, and limit the timeframe**

A recent client wanted to have access to five years of Sales data in its new Salesforce application – data that potentially included 500,000 unique products. Instead of blindly bringing in historical data on a half-million products, we asked for a report on which SKUs were sold in the most recent three-year period – analysis that cut the product data by 75%. Which is still a lot of products, but was a more realistic data migration task.

We usually recommend clients bring over three years of historical data. To be honest, with rare exceptions (and there always are exceptions), data from four, five or more years ago isn’t worth the time and expense required to clean it up for migration and integration.
CHALLENGE: Integrating customer and vendor accounts

Most ERP + Salesforce projects require customer and vendor accounts integration. Which quickly gets complicated.

For example, typically one of the first integrations is the Customer Master. Salesforce manages it in a single table. But ERPs store it in multiple tables. (One ERP solution has this key data in 12 tables.) So, the data must be pulled – accurately and completely – from locations across the system.

And to be successful integrating Opportunities data, the Sales Order, Salesperson and Products data must be brought with it – and all the data must be well-defined, current and clean.

Shipping data can be a pain point, too. The hierarchy of accounts is different between Salesforce and most ERPs, but it can be accommodated if you plan up-front for the hierarchy and the complexity around locations.

SOLUTION: Begin the integration process at the start of the project

By focusing on integrations early, we reduce the risk of missing critical integration points. What’s more, difficult integrations take time to do right. And, finally, we use the future functional requirements to know the integrations that will be required, and which data will be utilized (and which will not).

CHALLENGE: Battling the idea that integration must wait for the end of implementation

There’s no debate. Starting integration when the project is nearly complete is the wrong approach – and a strategy that will result in rework, expensive mistakes and missed opportunities for efficiency and performance improvement.

We understand why organizations think it’s best to wait to do integration until they have identified all the data they will need for their new capabilities. They want to be efficient, avoid changes and reduce the potential for wasted work. But experience shows that by delaying the complex integration work, they guarantee delays and higher Salesforce implementation costs.

SOLUTION: Embed integration in the methodology

Integration should be rooted in the project – and begin at kick-off. At ForeFront, we tie integration to business process implementation, do the complex work iteratively, test constantly, and give our consultants the time to ask questions and gain knowledge about your ERP – insight that helps ensure integration success.

SALESFORCE EXPERTISE AND INTEGRATION EXCELLENCE

ForeFront is a global systems integration firm that provides a broad range of solutions utilizing the Salesforce Manufacturing Cloud, Revenue Cloud, Service Cloud, Commerce Cloud and Experience Cloud.

Our strong experience and deep knowledge of the Salesforce multi-cloud platforms give us the ability to solve complex challenges in the manufacturing, automotive, energy, healthcare/life sciences, consumer packaged goods, media, and technology/software industries.

With offices across the United States and Europe, we work every day to keep our market-leading client companies at the forefront.

To learn more about our services, go to ForeFrontCorp.com.