

Four Clues Your Organization Suffers from Inefficient Integration, ERP Integration Part 1



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Why Adopt New Enterprise Applications?

Depending on your legacy, industry, and strategy, you have different reasons for adopting enterprise applications. The top drivers according to the 2013 Panorama Consulting ERP Survey:

- Improving business performance by aligning processes
- Fostering visibility
- Replacing applications too costly to maintain
- Integrating systems

From the same survey, 61% of organizations deploy applications on-premise, and 26% use hosting (SaaS).

Most organizations think of their enterprise resource planning (ERP) system as a vital tool for competition: It includes many functions. However, ERP systems are not integrated with dispersed systems – and they need to be.

According to Gartner, in just a few years, integration will be responsible for even more of the cost of new system implementations, increasing from 40 to 50 percent.

Why is this? Why, after more than a decade of adopting ERP systems that expose standard interfaces – and after the increasing adoption of Software as a Service (SaaS) — is integration still such a burden?

We believe the reasons have to do with inefficient integrations of new applications and systems. This paper sets out four common integration problems that are creating unnecessary costs and holding you back from realizing full value from your ERP efforts and your full potential as a company.

1 | Lack of Centralization

You might think of ERP implementations as being centrally deployed and managed, with the goal of consolidating legacy systems to reduce costs and improve process and data alignment. But in fact, for most new application implementations, deployments are made as several geographically distributed instances.

In this sort of segmented environment, it would be logical to standardize by deploying the same processes in all instances. But often the data necessary for these processes is not available in the same format everywhere across the company and needs to be adapted. The lack of easy data access slows you down and creates rework and inaccuracy.

Better functionality, fewer errors, and better organizational awareness result from using an integration platform that synchronizes data across instances. For example, in addition to your organization's global requirements, local instances need to support processes specific to local needs, such as complying with local regulations. At the very least, local processes need to be synchronized with, if not managed by the ERP. Therefore, it has to integrate local systems to meet both standard-global and specific-local needs.

Merck lowered development costs 35 percent and increased agility

To support end-to-end business processes, Merck needed to integrate more than 100 custom and legacy applications with its SAP system. After deploying TIBCO, the company reduced development costs 35 percent. It also expects that the SOA-enabled platform will allow greater agility in managing acquisitions.

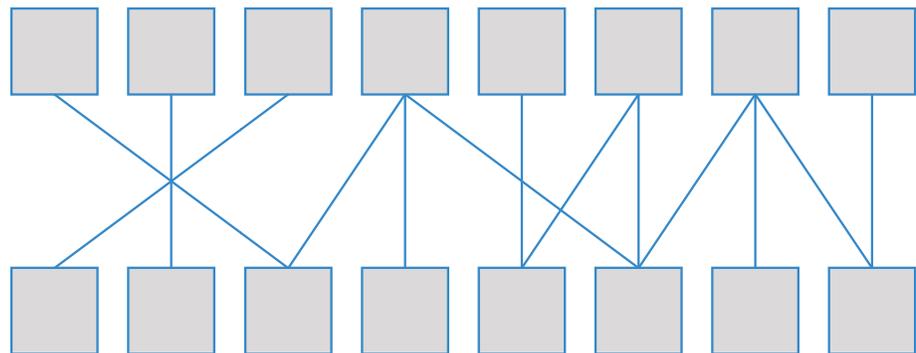
2 | Lack of Real-Time Data

Even as the functional scope of ERP systems expand, they still need to integrate other systems: parts acquisition, warehouse management, manufacturing equipment, and others. At the very least, custom legacy applications need to be integrated. The same is true for processes that cross company boundaries, including partner and other data in the supply chain.

Most ERP applications provide internal communication mechanisms to expose standard interfaces, such as open APIs, as well as transformation mechanisms and connectors to ease application integration. Most organizations are still depending on these integration methods, which exchange information, but mostly point-to-point and in periodic batches. These methods of information exchange put the organization at risk.

Risking Sales and the Customer Experience

When information isn't current, it prevents maximizing or consolidating sales. The situation also hurts the customer experience. A delay in providing a quotation or a product configuration can give a bad impression of your ability to execute, as does a delay in providing timely information about order status or progress. Delays are especially critical now because predictable and reliable customer experiences are the norm. Most customers track the quality of services they receive and benchmark suppliers, making the accuracy and speed of your response key performance indicators.



Point-to-point Integration: Time-consuming integrations and periodic batch updates of data

Risking Data Accuracy and Process Consistency

When systems do not provide all the data required to make a decision, it becomes the business user's responsibility to collect this information. To compensate for the capabilities not provided by the ERP application, users might create their own repositories in spreadsheets, a practice that impacts accuracy. They might even create rogue processes that work outside the ERP system. This situation can cause loss of control over data and processes, opposite to the initial goals of ERP.

Agilent improved productivity and saved time and money

“TIBCO has provided a simple, robust, and flexible toolset that enabled Agilent to connect the components of our architecture necessary to run our business. This capability has had a significant impact on improving our productivity and saving us time and money.”

– Marty Chuck, VP and CIO, Agilent Technologies

Postbank AG became compliant in record time

“TIBCO Software’s predefined tools and range of interfaces allow us to map our business processes extremely quickly – much more quickly than would be possible with normal tools like SQL. This meant we were able to implement the MiFID requirements in a record time of just six weeks – clear proof of the flexibility of our architecture.”

– Dr. Michael Schlosser, head of group client execution, Postbank AG

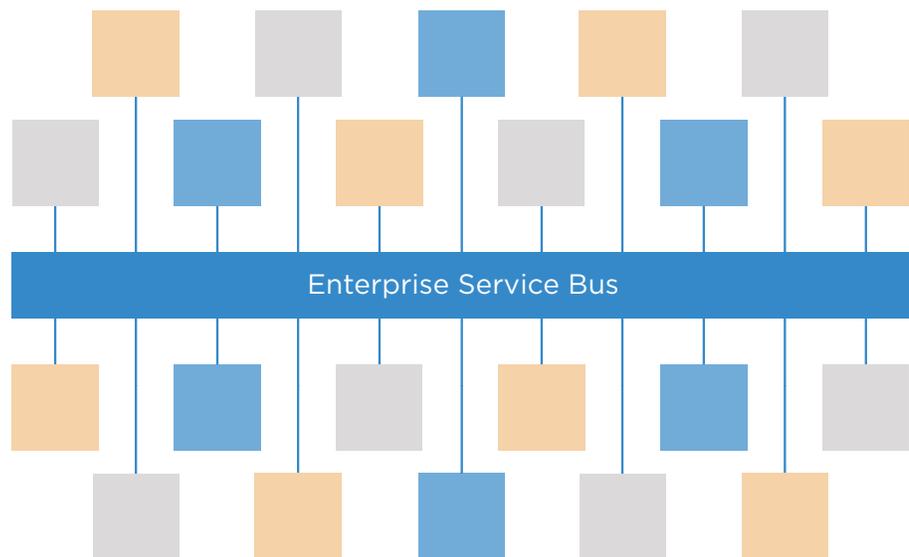
Risking Quality

Elements of key processes like product design, parts manufacturing, logistics, and supply chain are handled by partner companies. While some of these processes require only periodic information exchange, most require real-time integration to ensure the performance of the end-to-end process.

These partnerships are usually based on service-level agreements that need to be closely monitored because they impact processing cost or even choice of partner. The outsourced parts of your processes also need to be included in financial and accounting statements and made part of process performance measurement.

Real-Time Data Sharing

In contrast to the risk incurred with point-to-point data sharing, an integration supplying real-time information virtually eliminates risk due to inaccurate information, delay, and out-of-process activities. Consider the data interdependencies in a very simple order processing routine. The customer relationship management (CRM) application where the quotation is created needs to access information such as order history, last order date, and other data typically managed by the ERP system (or accounting/billing software). Later when the order is shipped, the ERP system needs accurate customer information, typically managed in the CRM. Because one of the primary drivers for using an ERP system is to improve business performance, up-to-date, accurate information is essential for business visibility.



Enterprise Service Bus Integration: Integration through a single connection and real-time data exchange

ChevronTexaco streamlined e-procurement

"Our TIBCO integration project has streamlined e-procurement processes and made us more efficient. The new system is enhancing collaboration between us and our suppliers. We have a history of every step in the process, so we always know who did what to each transaction, and when."

– David Crockett, e-procurement
solutions team manager,
ChevronTexaco

CargoSmart Limited strengthened its supply chain

"What's most vital is the ability to set expectations and make them transparent. This is the essence of what our TIBCO implementation allows us to do: it takes all moving parts of the shipping process and makes them visible, trackable, and subject to intervention that keeps the supply chain strong and unbroken."

– Steve Siu, CEO,
CargoSmart Limited

3 | Time-Consuming and Rigid Implementations

The increasing adoption of SaaS and cloud-based applications puts additional pressure on integration. SaaS is adopted primarily to add new functionalities to business processes. And the SaaS consumption model, as well as its deployment, dramatically reduces implementation time. To seize the full value from SaaS applications, you need to be able to connect to them efficiently and also rapidly. But the adoption (or retirement) of applications is not the only requirement.

ERP systems also need to rapidly adapt to support compliance, collaboration, and change. The inability to move quickly in these areas can mean fines and other penalties, missed opportunities, and inability to expand. On the other hand, executing quickly and effectively makes you strongly competitive.

Compliance

Regulations affect how ERP systems operate and the information they need to provide. Some of these regulations will be completely managed within the ERP system, for example, through accounting rules and rules for the financial services, healthcare, insurance, or the life-sciences industries.

Rules can enable transparency on the whole lifecycle of products, from design to sale, but most ERP systems and applications are only a part of these processes. Therefore, you must be able to capture and store information so it can be checked for compliance and transmitted to the relevant authorities. When you can manage this logic outside of the ERP system, even though the information needed is managed in it, you can significantly limit the time and cost needed to become compliant.

Collaboration

Integration technologies can also improve collaboration with customers, partners, and employees. Exposing some of the ERP system's services via an open API allows connection through various channels: mobile applications, external applications, and websites.

These integrations ensure that data and functionalities can be used by people wherever they are in the world. Operational staff can use a mobile application to consult data or make decisions. Partners can use one of their applications to ensure information is up-to-date. Exposing these functionalities via an open API or mobile application makes the ERP into what it is supposed to be, a system that enables constant interaction, better collaboration, and faster decision-making.

Detroit Water and Sewage automated and made employees more effective

“It is absolutely essential that our business processes operate flawlessly. With the implementation of TIBCO, we can now automate business processes and the flow of information between systems, giving our employees the tools they need to do their jobs effectively.”

– Kevin Quiggle,
information systems manager,
Detroit Water and Sewage

Change

All organizations need to change to carry out the business strategy. Using existing infrastructure, you should be able to enter a new market or geography without a major investment. This implies that current ERP functions can be invoked for those needs, but also that integration with other applications can be added to fulfill the specific needs of the new market or geography.

You might want to grow through merger and acquisition. In this case, it is likely that the goals of integration will be to reduce costs by eliminating redundant applications and to generate economies of scale without impacting business performance. A newly acquired company needs to be integrated into the organization as soon as possible, meaning its ERP systems and processes. Or a longer-term roadmap needs to be defined for retiring redundant systems while ensuring coherence and visibility of processes in the interim.

Integrating progressively and non-intrusively – and gathering relevant data so that the health and performance of the newly acquired enterprise can be proved – are key capabilities for a successful merger or acquisition.

4 | Processes Don't Allow Differentiation

The great benefit of ERP systems is that they aggregate domain and industry best practices, which helps ensure standardization, and that all processes are improving business performance. The drawback is that this uniformity doesn't differentiate you from competition that may use very similar processes.

A necessity for process differentiation is first and foremost real-time information. Up-to-the-minute data – whether internally or externally generated – provides visibility. You can feed it to monitoring, analytics, and decision-management systems to help understand context – of the process, customer, and other factors – then make decisions quickly to capture opportunities or curtail impact.

The other requirement for differentiation is the ability to compose different functionalities using data and various systems, for example, making support decisions by aggregating product or customer information from various sources.

These requirements cannot be fulfilled by the ERP system if it doesn't have all the relevant data, and its size and rigidity make integration with external data and logic difficult. The goal is to quickly define and adapt integrations in cycles that are much shorter than the usual ERP upgrade.

Summary

Inability to access data, lack of real-time information, and technology that prevents fast execution of changing business strategy or reinvention of processes are signs you are suffering from inefficient integration. That probably means you are spending more on integration than necessary.

An alternative approach supplying real-time information that can be easily and quickly accessed by systems throughout your organization, and the ability to make new integrations quickly and easily, lets you use your ERP and other assets to:

- Develop better execution with end-to-end visibility into processes and context so you can identify an issue early, assess its impact, and resolve it.
- Increase adaptability so that operational and business teams can staff according to workload and prioritize according to objectives, leading to better performance that translates into greater customer satisfaction.
- Improve agility by creating new processes to either provide new services or adapt existing processes to improve response to demand and potentially generate new revenues.

For an explanation of modern methods used to achieve these capabilities, see *Fifteen Clues that Your ERP System is Ready to Take Your Business to the Next Level, ERP Integration Part 2*.

For more information on TIBCO's integration platform, join us at www.tibco.com/maturity.

TIBCO Software Inc. (NASDAQ: TIBX) is a provider of infrastructure software for companies to use on-premise or as part of cloud computing environments. Whether it's efficient claims or trade processing, cross-selling products based on real-time customer behavior, or averting a crisis before it happens, TIBCO provides companies the two-second advantage® – the ability to capture the right information, at the right time and act on it preemptively for a competitive advantage. More than 4,000 customers worldwide rely on TIBCO to manage information, decisions, processes and applications in real time. Learn more at www.tibco.com.



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