Extending ERP into the Cloud

How Internal ERP and External Cloud Supply Chain Systems Can Work as One
ERP: Great for Internal Business, Lacking for External Collaboration

ERP systems are the centerpiece for managing internal business processes. Comprised of complex, highly configured software and hardware, they take years to fully install and require dedicated customer IT resources to maintain. Many enterprises operate several ERP systems running independently between multiple locations and lines of business. Most ERP vendors offer solutions that extend beyond the traditional ERP business processes into areas like Supply Chain Management (SCM) and Customer Relationship Management (CRM). The argument is compelling: “Consolidate all key functions on a single system that you already have in place, stick with a common data model, enhance your ERP investment.” But there are limits to how well an internal system can be extended to support external business processes involving multiple partners and companies — particularly when a business has global reach.

The Global Supply Chain: Pushing Beyond the Four Walls of the Enterprise

Companies across all major manufacturing and retail industries are struggling to make sourcing decisions that balance cost considerations and the need to manage supply chain risk and complexity. They must consider the realities of conducting business with hundreds (or thousands) of supply chain partners, located all over the world, with all kinds of IT systems and competencies.

Most ERP solutions are not designed for multi-party collaboration beyond the four walls of the enterprise. They can, however, be fortified with powerful, cloud-based platforms that can extend their functionality to external partners. These systems centralize and standardize supply chain data, coordinate the flow of information and intelligence across companies, and enable effective supply chain execution on a global scale. Choosing the right technology calls for a detailed audit of a company’s needs and resources.

Traditional ERP vs. Collaborative, Cloud Based Architecture: When Does Each Make Sense?

When a traditional, client server architecture makes sense (ERP):

- For applications that require access primarily by users inside of a single organization
- For solutions requiring minimum system-to-system connectivity (integrations run in batch, less dynamic)
- For static applications, often requiring heavy data churning (i.e. GL, AR, AP). These systems will often be the enterprise system of record and data store
- Where the customer is willing to make a larger up-front investment — and devote internal resources to manage hardware, operations, maintenance, and software upgrades
When a collaborative, cloud-based architecture makes sense (SCM/CRM):

- For applications that require access by many inter-company users
- For solutions requiring a high level or system-to-system connectivity — and where partners being connected are dispersed globally and have a wide range of technical ability
- For dynamic, transaction-based applications where the status of an object changes frequently (a contract, booking, order status)
- Where the customer is looking for a smaller up-front investment — lower fees, no hardware, minimal IT resources

Extending and Complementing ERP with Cloud Supply Chain Technology

Cloud-based supply chain execution platforms augment ERP systems and enable tighter control and monitoring over trading partners in complex supply chains. By leveraging integrated supply chain execution technology, companies add agility and flexibility to the systems they’ve already invested in.

The visibility and control that cloud platforms offer allows companies to greatly reduce manual processes, more efficiently manage inventory and transportation, and streamline the financial and regulatory requirements that come along with operating a large global supply chain.

Looking Forward: More Cloud, More Integration, More Agility

ERP software is essential in managing internal business processes. Cloud platforms are indispensable in managing a global network of external partners and stakeholders. They were born of a different era and built on different assumptions, but when integrated they create a centralized supply chain nervous system that can process huge amounts of data and create a clear picture of global activity.

Now, cloud-based supply chain networks take the functionality of legacy ERP systems and extend them to facilitate collaboration across an entire community. As the complexity of global trade grows, so does the potential for cloud to give companies greater agility and control that extends to the far corners of their supply chains. They’ll be able to operate not as single entities, but as highly orchestrated business networks.