Natural Selection in an Electronic Supply Chain World—Avoiding traps in securing your supply chain solution.

By Preston D. Cameron

So you've decided you need a new supply chain solution for your business? Yes, it was probably inevitable.

The revolution that's going on in business is being driven by information technology. The Internet has opened the door for business models that would have been unthinkable just a few years back. Even in the most traditional of industries, new tools are emerging that are reshaping the way companies should do business with their customers and suppliers (the supply chain).

And to make matters worse, the pace of this change is accelerating. Homegrown systems have become an endangered species as organizations find they can't keep programmers long enough to keep them current. Even today's leading software packages have difficulty keeping pace with the nimble, new upstarts.

With technology becoming a key part of every business's competitive strategy, how do you turn the selection of a new supply chain solution in the "e" world into a natural and successful process?

Try applying a top-down evaluation process, and you'll find that the selection process can help generate the most beneficial supply chain management software application for your organization.

So, now that you have been tasked with selecting a software package to support your state-of-the-art supply chain requirements, what next? This sounds simple enough initially, except that your organization might have more than a dozen business units, each with disparate product lines and multiple unique distribution channels. Add to this the fact that no two divisions may have common business processes or data structures. Then consider the variety of software suppliers out there hawking their superior capabilities using a plethora of acronyms. No need to mention that your Chief Information Officer has his fingers crossed hoping that you will recommend a solution from within your existing enterprise resource planning (ERP) platform, or that your Chief Financial Officer is probably looking for a return on this investment with double digits.

Selecting software for supply chain management can present a daunting task in not only a large, multifaceted organization—but also for a small, single process business. Typically, the software experts lack supply chain expertise and the supply chain experts often possess limited understanding of information technology. Furthermore, systems alone rarely provide the solution to supply chain problems; instead, most system implementation efforts require process reengineering and occasionally major organizational upheaval. Although we can't address all the inherent difficulties of selecting a supply chain software solution in this brief article, we can try to provide some guidance in the frameworks facing the supply chain professionals who are undertaking such a task.

Common Traps

For starters, utilizing a top down view of your critical supply chain requirements should drive your software selection because any information technology investment should be driven by strategic business needs. As simple and logical as this advice sounds, most organizations fail to follow it. Instead, organizations often fall into one of the following traps by ignoring that all essential strategic perspective.

The "Ultimate Solution" trap catches any organization that allows their information technology (IT) department to drive the selection effort. These organizations assume that the software selected will ultimately solve all the supply chain problems; therefore, the IT folks are allowed to conduct the selection process without adequate involvement from the supply chain experts. Instead of including those experts with the day-to-day experience of managing the supply chain, a logical focus on the technology of the software is undertaken. Instead of considering a software solution that best meets the functional requirements of the organization, emphasis is placed on an ability to integrate the software solution with other existing software and to upgrade and maintain the entire system over time.

The "Song-and-Dance" trap can catch the unwary supply chain professional. Software firms invest millions in training and support of their salespeople. Not surprisingly some firms can put on an impressive show. The number of vendors and alternative solutions can further stack the cards against the supply chain professional. A software sales team member makes hundreds of presentations during his or her lifetime, while the typical supply chain professional may only get involved in few selection processes during the course of their career. As a result, a naïve selection team may easily be swayed by relatively unimportant issues such as those "totally cool" web interfaces or the most polished of sales presentations.

The "Accessory" trap hooks an organization into acquiring new software beyond its true business needs. By going beyond the typical bells and whistles problem, it catches the savvy, experienced supply chain and IT professional. Instead of falling prey to superficial functionality and

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sales pitches, an "accessorized" victim seeks the real functionality offered by the most extensive solution. Unfortunately, superior functionality adds little value when it extends the solution beyond the real business requirements of your organization. For example, real-time forecasting with dozens of different algorithms may be of no value to the organization needing only a simple exponential smoothing model with a monthly seasonal overlay. Selecting the "Accessorized" supply chain software solution will drive up the initial cost as well as the implementation investment—without a commensurate incremental return.

Finally, "Paving Cow Paths" is the most common trap encountered in any selection process. In this trap, the supply chain organization expects the software to automate existing processes—regardless of whether those practices make current business sense or not. Bias toward maintaining current processes drives the decision toward the most flexible software solution. Unfortunately, simply replicating old practices with automated tools rarely produces any significant business improvement. Even beyond the selection decision, this trap continues to hound most supply chain solution implementation efforts as users request modifications to the software to meet special needs. More unfortunately, the special requests often reflect idiosyncratic preferences rather than any real business need.

Regardless of the size of the organization, selecting a new supply chain software solution must be treated as an important project. Many organizations begin without a clear understanding of the vision and business needs that are driving their supply chain requirements. Before starting the process, you can raise the level of the project's significance by establishing and documenting 6 critical steps.

1. Establish a steering committee that actively manages the entire selection and eventual implementation project.
2. Define the near-term business needs and the long-term business goals that the software system will support.
3. Establish a software selection and implementation budget based upon future organizational goals, rather than where the organization is right now.
4. Create a selection team that represents the interests of the entire organization and empower the team members to make the actual selection.
5. Assign "power user" participants—end users who participate in product demonstrations, assist in the evaluation process, and influence the selection team.
6. Establish a review mechanism prior to starting the process, involving the steering committee with whom you can escalate issues and resolve differences.

Multiple imperatives may launch your search for a new supply chain software solution, but before you go too far in the process, can your selection team step back and clearly articulate the expected benefits of any new system? The benefits from implementation of any supply chain system capabilities should come from providing information to help drive purchasing cost savings, improving inventory management, and reducing costs while improving quality and responsiveness through process automation and standardization. If you've conducted a legitimate analysis, you should be able to articulate and group your benefits into at least these three areas.

Can you translate your supply chain imperatives into systems requirements for each relevant supply chain model? Though each software organization deploys different terms and draws different boundaries between modules, a framework of your functional categories can help you to organize information in defining your supply chain management system requirements.

Your categories should represent your full spectrum of supply chain functionality, from tactical planning to daily transactional activities. This framework can provide a structure for defining your user requirements in general supply chain terms rather than vendor-specific software modules. Brainstorming sessions with your supply chain practitioners and users from other key functions within your organization can help you capture and categorize these requirements. Such a process establishes the specific demands of an organization's supply chain and helps to define the minimum required functionality that a software solution must support.

When assessing whether a software solution meets your system requirements, the entire process will demand a significant amount of effort in: reviewing sales literature, issuing and analyzing questionnaires and surveys, and scheduling "fact-finding" meetings with multiple suppliers that could include customized demonstrations. How much time do you have to devote to this process? Making a decision ultimately requires balancing the increased functionality versus technical complexity of any selected solution. Given that most organizations embody multiple supply chain models, assessing each model independently across the categories of functionality can be helpful. Knowing when to seek professional assistance becomes essential.

The supply chain software selection presents a formidable challenge for even the most expert of supply chain management professionals. Whether you are novice or an expert, a proven methodology and solid framework can help you quickly navigate the terrain and avoid the common traps. Of course, selecting the supply chain solution covers only the first portion of your journey; and unfortunately, more traps may await you during the course of a typical implementation.

So be careful, and watch your step!

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