The Success and Failures of Advanced Supply Chain Management Tools

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Today, there is a renewed focus on driving out supply chain costs and further improving customer service. Many distributors and retailers look to their industry leaders and observe how advanced supply chain management tools have driven down the leaders working capital and supply chain costs, allowing them to take market share through aggressive prices and promotions, while at the same time improving their ROI. Well-known success stories are Best Buy, Home Depot, Lowe's and, of course, the father of this business practice, Dell.

On the other hand, the same tools and practices that have contributed to these spectacular successes have also yielded dramatic failures, where companies like Nike and Siemens have blamed these supply chain tools for many of their problems.

Many factors contribute to the success and failure of these tools and practices, but one point is abundantly clear and that is that resources — namely money and people — need to be applied at the appropriate time in order to ensure success is achieved. When investigating these tools, the first thing one learns is that the cost of the software and its implementation is extremely high and is all loaded up front, long before any value is realized. Usually the projected value is only realizable long after the software vendors and their implementers have completed the project and the organization alone is responsible for delivering the benefit with minimal support. What makes this position even more difficult is that in order to justify this large up-front investment, the ongoing operating costs and resources are often woefully underestimated. Typically, all companies implementing these tools and processes have faced this dilemma. Those who have been successful have had the resources and fortitude to continue investing in the successful operation of these tools and processes.

Another consequence of this large up-front investment is that many companies will not even consider using these tools and processes, thereby leaving large savings on the table and allowing their competitors to forge even further ahead. The answer to this dilemma is to discover an approach that will allow your organization to closely link the timing of the investment and value realization. The ROI calculations will suddenly look extremely favorable and acceptable to all stakeholders. This can be achieved by:

- Dividing the implementation into manageable phases where tangible deliverables can be achieved within three months. This is accomplished by selecting a portion of the business that can be implemented within three months with a reasonably high level of success with respect to data integrity and acceptance of change and by insuring clear accountability for implementation and ongoing support.
- Select a business area that has the least amount of personnel friction and can work together and with other parts of the business.
- If many parts of the supply chain need to be improved, start with a smaller subset so as to reduce the up-front investment. The planning side of the supply chain is usually the most neglected and, therefore, provides the greatest opportunity for improvement. Accurate and timely demand plans are the primary input into any supply chain-planning tool and, therefore, are an ideal place to start. Plans that are more accurate will usually result in lower safety stock, improved in-stock levels, and the ability to isolate slow movers, highlighting immediate improvements in inventory management. Other key areas are replenishment planning and transportation planning. Once sound planning processes are in place, the visibility and priority for other supply chain improvements becomes more apparent.
- A key requirement, to ensure the investment in these tools yields the required ROI, is an accurate and timely understanding of how product purchases and the subsequent sales will impact cash flow, inventory, accounts payable, and accounts receivable. The most successful retailers and distributors have been able to closely correlate the flow of physical product with cash flow. The ideal situation is to receive cash from the customer before or at the same time as having to pay the supplier, resulting in a close to zero or negative working capital. Therefore, functionality in the tools to continually manage supplier terms, inventory, related customer terms, and how change in these areas will impact cash flow is vitally important in yielding the required ROI.

- A large amount of effort is usually devoted to cleansing and consolidating data before an implementation. Rather than using expensive external implementers, much of this work can be done by less expensive internal personnel, thereby allowing for a further reduction in up-front costs.
- Ensure that once a part of the business is "live" with the new approach that the results can be measured and reported. These savings can therefore be offset against the ongoing implementation and operating costs.
- Seek solution providers that will work with your organization to reduce up-front costs and that are prepared to continue supporting the operation of the supply chain solution.
- Dividing the implementation into smaller pieces that run in parallel with the ongoing operations of "live" solutions will require the solution provider to remain on site, forcing your provider to continue supporting the "live" ongoing operations.

Remember that value can only be extracted once the solution is fully operational. This is the time when the organization needs the highest level of ongoing operational support, which can be developed internally or in combination with the solution provider. Success will be further increased if the following are built into ongoing operations:

- When implementing a demand planning solution, ensure your organization has the ability to continuously enhance and adapt the underlying statistical forecasting techniques to the changing market conditions. These solutions become outdated quickly and, without the ability to enhance and adjust, users become disillusioned with demand accuracy, begin ignoring the sales forecasts, and use old methods or develop their own approach to forecasting.
- Ensure that product replenishment tools incorporate all the relevant business rules associated with your organization's industry and that the solution is able to adapt quickly to changing rules.
- Continuously monitor and correct the underlying transactional and master data feeding these solutions. Bad data will quickly result in inaccurate results and disillusionment with the solution.
- Ensure all the basics are in place before embarking on more complex solutions, such as:
  - Accurate and timely demand plans are accepted by all relevant parties.
  - Purchase and replenishment plans are driven from demand plans and are executable without much adjustment and, again, are accepted as accurate by all.
  - Close to real-time visibility of the execution of the demand and supply plans within the organization are in order to ensure a quick response to changing conditions.
- Only once the internal house is in order, should the company embark on the more ambitious collaborative solutions external to the organization.
- Ensure that tight links exist between the financial chain and the physical supply chain. The organization needs to be able to understand quickly the supply chain implications on cash, working capital, and gross margin in order to make effective decisions.

In summary, companies embarking on an advanced supply chain management implementation and operation need to be aware that value is only realized once the system is operational and, therefore, skills and resources need to be applied after implementation, during the operational phase. This reality, in turn, challenges investment justification where ROI hurdle rates on projects must overcome the high up-front investment where value realization is achieved much later, coupled with relatively high operating costs.

Solution providers now exist who will work with organizations to reduce the up-front investment and ensure support is available to operate and even continually enhance the solution and the value opportunity. The new world of applications over the Internet, coupled with a high level of ongoing technical and business support, provides companies that have previously rejected the implementation of these advanced supply chain solutions with the opportunity to reconsider their decision.

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Wolf Kursten was employed with Andersen Consulting for 10 years where he was involved in implementing MRP II, DRP (Distribution Resource Planning), and ERP systems as well as pursuing potential customers. Wolf joined Ernst & Young in 1996 and held a key management position in a start-up ASP which included developing the corporate strategy for the ASP; designing the business models and technical strategy for the ASP's clients; and managing the implementation and operation of supply chain optimization software tools and all supporting technologies.

Wolf founded K2B with a vision to revolutionize the way advanced supply chain solutions are delivered to businesses. Wolf's responsibility is to create the vision and strategy to continually create value through the application of K2B's solutions. Wolf also works closely with K2B's product development team to align existing and new products with customer requirements.