

Why the Controversy over ROI from ERP?

by R. Michael Donovan

In past columns, I have emphasized what should be done to make ERP a good investment. It is very common, however, for companies to take a big leap of faith with ERP and supply chain management systems. And, unfortunately, more than 90 percent of the companies that have implemented ERP have not had a truly successful implementation the first time around. Despite the recent rash of articles about the limited returns from ERP, however, the ROI potential is there. The caveats are:

- ERP must be driven by the right strategic and tactical process improvement objectives, with documented assumptions and valid ROI expectations and metrics.

- The new processes and ERP must be implemented correctly and quickly to meet ROI expectations and become positively measurable.

These two points may seem obvious, but ERP and supply chain management are rarely approached in this manner the first time. As a result, many problems arise during and, worse, after implementation. This usually necessitates a re-implementation effort or at least a major tune-up.

Unarguably, ROI comes from process improvements ERP supports, not from new ERP software. What's the difference? ERP software alone, no matter how good it is, makes little impact on improving business performance. If you continue to follow the same pre-ERP business processes after implementation, you can expect the same or possibly worse performance. ERP software can, however, enable and support many new processes, but not without the organization deciding what those processes are and accepting their use.

What's been happening?

With the implementation success rate so low and positive ROI often nonexistent, many now think that ERP systems are expensive, wasteful exer-

cises. There are companies that have ignored ERP and pursued a non-ERP strategy, and that have focused exclusively on cutting inventories, cycle times, costs, etc., through the application of demand-based flow manufacturing. Eventually, the organization begins to learn ERP can serve many valid and necessary purposes such as storing product definition data, processing sales orders, planning material needs, paying and issuing invoices, etc. The list goes on, but the point is that ERP and flow are not mutually exclusive.

I have long advocated reducing cycle time and using flow production techniques. Cycle time reduction and flow are not solely about changing production processes, however. What many companies overlook is that information must flow before material starts to flow effectively and quickly. If the information system is full of queues and/or bad data, and they often are, then cycle times will be longer. Also, it is true that some traditional ERP scheduling logic is ill-suited to flow manufacturing and supply chain management, but other aspects of ERP are quite supportive.

ERP implementations have been plagued by a long list of other afflictions. The following are some common problems:

- ERP software was installed to mirror a set of existing, inadequate business processes.

- The high expense of fixing legacy systems for Y2K was the predominant driving force to replace old systems with new ERP software.

- Organizations were painfully ill-prepared to conform to best practice process templates chosen by the ERP systems integrator.

- Management did not answer the question, "How do we want to run our business and why?" and therefore, maximizing performance through significant business process improvement did not occur.

- Implementations were often done by inexperienced consultants/system integration personnel with limited understanding of how a manufacturing enterprise could and should run.

- Pre-implementation preparation activities were not understood and done.

- Executive sponsorship and active, on-going involvement with the ERP implementation were lacking and, as a result, lots of political bickering and barriers to success surfaced and ultimately became more and more difficult to overcome.

- IT personnel were all caught up in beauty contests of technical wizardry and, as a result, their concentration was not totally focused on helping the business to become a higher performing company in meaningful terms.

- IT personnel were subjected to the slam and cram of new technology without having the time and training to transition from the old legacy system technology to the new.

The ERP ROI debate

Most new ERP system implementations have been disappointing, and have needed significant cleaning up to achieve positive ROI. Many ERP implementation failures were caused, at least in part, by Y2K being the driving force behind the project rather than defined business performance improvement objectives.

With Y2K as the driver, ERP became a software replacement project, and after expenditure approval management often stepped aside and let information technology and systems integrators take over the installation of software. In cases like this, there are no meaningful strategic and tactical objectives and therefore, by definition, no business performance-oriented metrics can reasonably exist—never mind performance improvements. Yet, too often management wonders why its expectations, often set by others, are nowhere near

being reached.

There are managers, depending upon their function and position, who are comfortable working with expense and profit numbers and others who are equally comfortable working with revenue and market share. The typical ERP system justification is so often driven by functions such as manufacturing, finance, materials and information technology, which are functions that are generally more comfortable working with so-called tangibles such as expenses, profit, inventory investment and the like.

Some are of the opinion that many aspects of ERP ROI are so well-hidden that they cannot be reasonably measured. The not-so-obvious benefits, which some like to call soft or intangible, are where people really get hung up, and very little or no time is spent trying to predict the economic impact. In companies where the CEO is strategy-oriented, these numbers are not considered soft, but are specific, targeted objectives guided by action plans that have specific metrics to gauge the expected incremental performance improvement. Simply put, if you can develop and apply reasonable metrics to intangibles such as customer satisfaction, communication, decision cycle time, decision-making quality, cycle time, delivery performance, etc., then it is very likely the economic impact can be reasonably predicted.

Unfortunately, many executives associated with increasing revenue and market share are not involved enough in ERP and supply chain management system planning and implementation. As a result, the top-line numbers for justification are soft, even though they shouldn't be. Worse yet are implementations that focus on the various hot buttons of the moment in manufacturing, accounting, engineering and information technology. The fact is, strategy and its implementation are often not considered in ERP system planning and implementation and therefore, ROI from strategic improvements does not materialize. See my columns, "Successful ERP Implementation The First Time" at midrangeERP.com/perform and, "Supply Chain Management: Plan To Succeed" at [form for some further thoughts on strategy and effective implementation for increased ROI.](http://midrangeERP.com/10per-</p></div><div data-bbox=)

ERP's strategic drivers

One of the most important issues is how more effective supply chain management can improve revenue and market share as well as lower costs. With management compelled by common sense and the desire to achieve and maintain an edge in the marketplace, supply chain management has become the collaborative extension of internal operations between customers and suppliers. The concept of one set of numbers for everyone has been around, at least in theory, for some time, the objective being a better coordinated management team that's all on the same page. The concept of a single set of better numbers brings a much expanded and very important meaning to coordinating customers' needs with production scheduling and supplier requirements in collaborative supply chain management.

Review and revise

Today, nearly every management group needs to review and revise its supply chain management strategy often, in the pursuit of achieving and maintaining a competitive edge. Companies considering a new ERP system, as an enabler to more effective supply chain management, need to get to the heart of ROI early in the planning process. Management needs to ask some challenging, broad-ranging questions, and seek answers that demonstrate a tie-in to the company's overall goals and objectives. Asking tough questions and making sure the answers are solid and as fact-based as possible should help to clarify many issues and priorities, such as:

- Will ERP help us to improve customer satisfaction? How? How much and when?
- Will ERP contribute to increasing our market share? How? How much and when?
- Will ERP decrease our operating expenses? How? How much and when?
- Will ERP help to increase revenue? How? How much and when?
- Will ERP decrease our inventory investment? How? How much and

when?

- Will ERP shorten our order-to-delivery cycle time? How? How much and when?
- Will ERP help us keep pace with or surpass our competitors? How? How much and when?
- Will ERP shorten our time-to-market? How? How much and when?
- Will we be able to reduce our material costs through improved supply base management? How? How much and when?
- Have we appropriately defined responsibility and accountability for these business performance improvements?
- What are the metrics for measuring performance improvement in both tactical and strategic areas?

In my opinion, strategic benefits, with actual results not available for a few years, should be based on solid, time-phased assumptions of outcome and reasonable estimates of likely results. It is much more appropriate to scrutinize ERP up front by establishing realistic objectives and performance measures before any significant commitments are made. Without appropriate performance measurement, realistic accountability is just not possible. To achieve your objectives, you must know the route you are taking and the time it will take to reach your destination or you will never be sure you got there.

There should be no controversy about ROI if you cover both the tactical and strategic issues of how ERP can or cannot support improvements in your business performance. Everyone in the organization needs to understand that positive ROI comes from changing the way business was performed in the past to more streamlined, faster and lower cost processes that better serve the needs of the customer. If you do that very well, it will be a winner. ♦



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