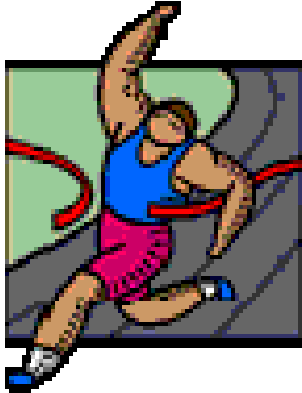

What is *Speed to Market*?

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A *Speed to Market* reader in Redding, California sent us an email with a simple question: “What exactly is *Speed to Market*?” He went on to explain there was so much material in the newsletters and STM books he was having a hard time organizing it all. We figured he might not be the only one trying to get his or her arms around STM, and so thought “*What is Speed to Market?*” would be a good theme for an article.

First, it’s important to point out what *Speed to Market* is not. It’s not a program like ISO or TQM or Six Sigma or some other alphabet soup that is imposed on an organization in an attempt to make it perform better. The problem with these types of programs, in addition to their lack of suitability for job shops, is they mostly “fall out” and are abandoned because the energy and discipline required to maintain them cannot be sustained. That is why so many fads come down the pike one after another. There is no question it is difficult to manage change while simultaneously running a business day-to-day. However, once you begin to implement *Speed to Market* you will find the concepts and tools reinforce themselves and become an integral part of how you manage your business.

Speed to Market is a system of concepts, tools, understanding, techniques, and metrics that is designed to fit order-driven businesses. STM is built around the quotes to cash process with an emphasis on cutting lead time as a strategy for performance and profit improvement. However, it is not obsessively focused on cutting lead time. STM takes the broader view of developing the ability to manage these types of businesses while continuously improving performance, profitability, and competitiveness.

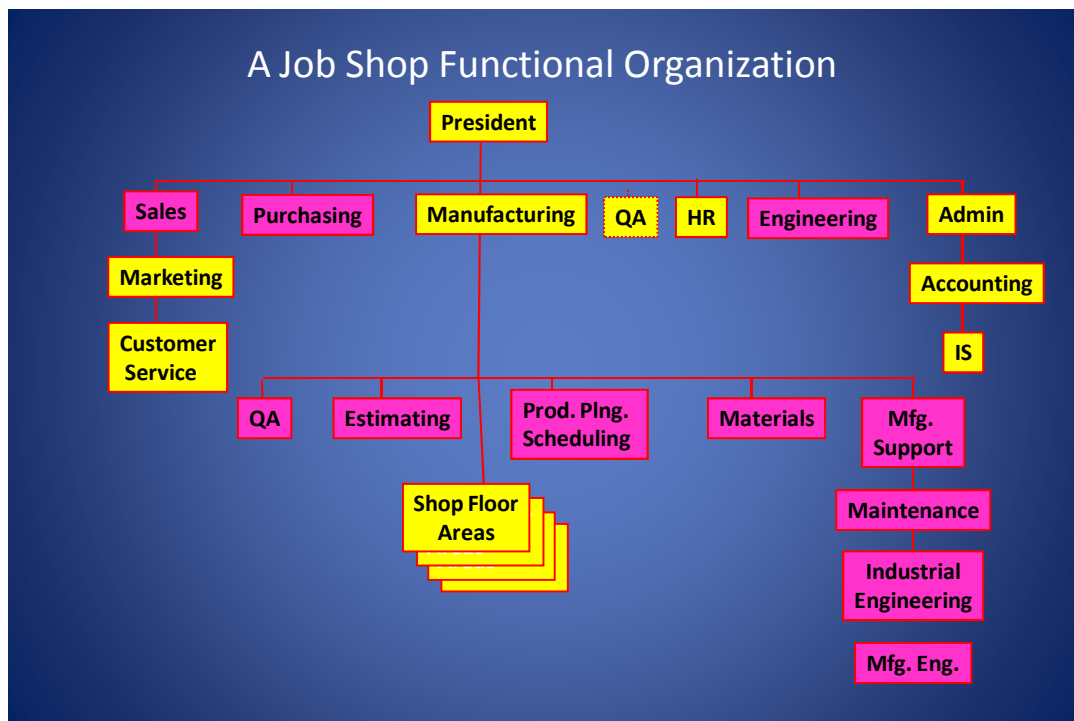
***Speed to Market* is based on the following, all of which all work together as a system:**

1. Understanding differences between build-to-stock and make-to-order business models, and the implications for management
2. Horizontal management of the quotes to cash process
3. Cutting lead time
4. Using task time and chronological time appropriately
5. Building an effective organizational infrastructure
6. Managing with data
7. Using performance feedback to drive continuous improvement

Understanding differences between build-to-stock and make-to-order business models, and the implications for management: *Speed to Market* readers know we have been hammering on this theme for a long time. It's probably the major reason that lean manufacturing, as it commonly applied, has limited utility in job shops and similar order-driven businesses. The following table illustrates key differences between these two models. Once these dissimilarities are understood, the implications for management become obvious.

| <i>Job Shops</i> | <i>Mass Production Operations</i> |
|---------------------------------------|---|
| • Make to order | • Build to stock |
| • No finished goods inventories | • Finished goods inventories/SKU's |
| • Different products | • Standard products |
| • Proprietary Products | • Make to customers' specifications |
| • Sell to other companies | • Sell to distributors or end users |
| • Customer order driven | • MRP demand forecast driven |
| • Bid on RFQ's to get work | • No RFQ's |
| • Estimating is critical | • Standard costing |
| • Customer pricing (quotes) | • Market pricing |
| • Lead time required | • Fill orders from finished goods inventory |
| • Many schedule changes | • Few schedule changes |
| • Set ups/changeovers frequent | • Set ups/changeovers less frequent |
| • Direct contact with customer | • Indirect contact with remote customer |
| • Smaller companies | • Larger companies |
| • Owner managed | • Professionally managed |
| • Variable overhead allocation | • Labor-based overhead allocation |
| • Variable volume | • More stable volume |
| • Order backlog is good | • Order backlog is bad (stockouts=lost sales) |
| • More dynamic | • More static |
| • More skilled labor (variable tasks) | • Less skilled labor (repetitive tasks) |
| • Dynamic scheduling | • Static scheduling |
| • Shorter runs | • Longer runs |
| • Improve by reducing lead time | • Improve by reducing inventories |

Horizontal management of the quotes to cash process: Most of us in management have been led to believe our primary task is to manage an organization. As a result, we walk around with an organization chart model in our heads as representative of the managerial task.

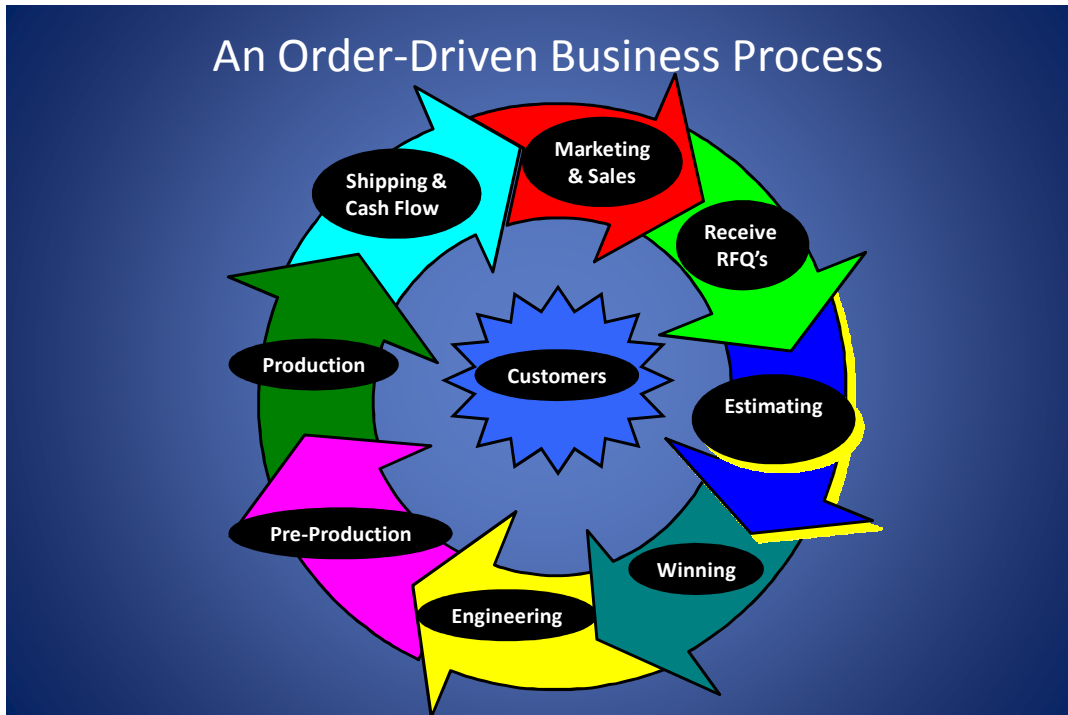


However, this model is deceiving. First of all, it is relatively static and rarely changes. Maybe we move a box around from time to time or change a person in a position. If we have done our jobs well, it is staffed by competent people who know more about their jobs than we do. As Theodore Levitt wrote in his book, *Thinking About Management*:

The Effective Manager does lots of things, but there are at least three things he or she must do:

- *Think about the purposes of the organization and the direction in which it must be led;*
- *Foster and manage change; and*
- *Conduct operations so that the organization and its people can function effectively and efficiently.*

He doesn't say anything about micromanaging people in the hierarchy or failing to delegate appropriately, both of which are guaranteed to produce marginally functioning organizations. Rather, what you are really managing is the flow of work through the quotes to cash process. The graphic on the next page illustrates this process in an order-driven business.



You are actually managing this process on a day-to-day basis, not the organization chart. Cutting lead time means getting orders converted to cash quickly and efficiently. “On time and on budget” has to be your managerial mandate. The owner and/or general manager is responsible for making sure this process functions effectively and efficiently.

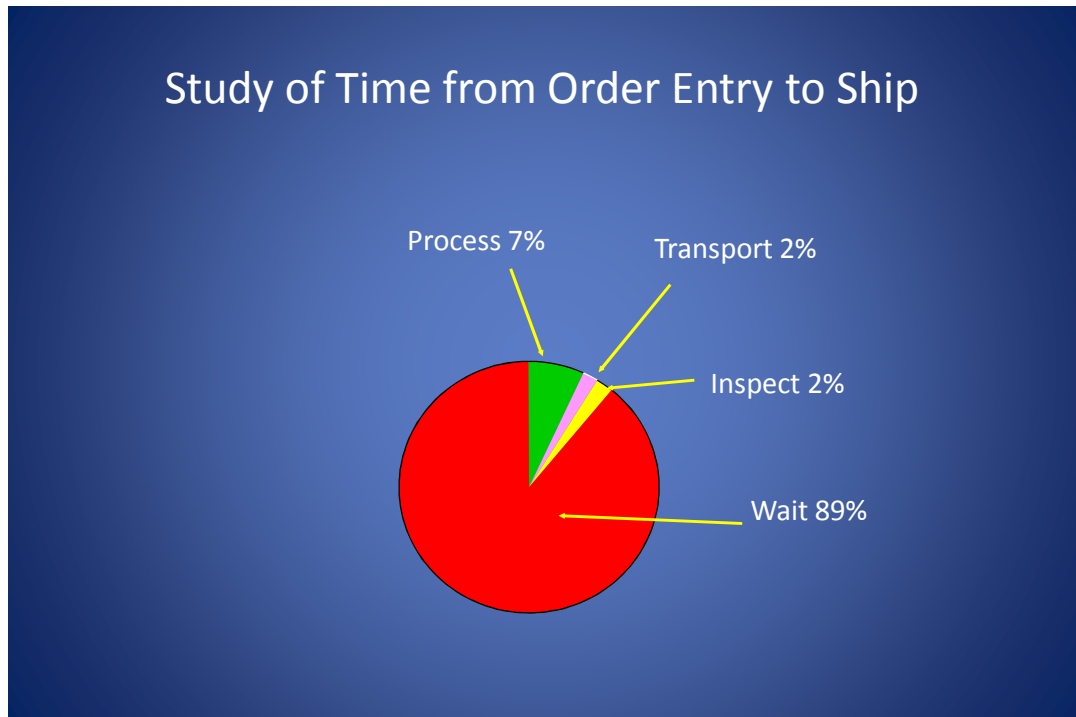
Note: Activity takes place in each of the steps in the process simultaneously, as well as sequentially when it comes to a specific order.

Cutting lead time: In the book, [Speed to Market: Lean Manufacturing for Job Shops](#), lean is defined as cutting lead time in these types of businesses. This is a strategy for performance improvement that yields significant financial and competitive benefits. Improvement comes from eliminating and reducing unnecessary delays in the process as opposed to making people work faster or harder. See the article [Theory of Delays](#) for more information. (This is newly posted to the Delta Dynamics web site.)

Using task time and chronological time appropriately: *Speed to Market* makes a distinction between two types of time: *task time* and *chronological time*. Most of us in management have learned to think in terms of task time because this is how productivity is measured. This involves getting more output per labor hour, or more pieces per hour from a machine, or less cost per unit of output in some other fashion. Task time deals with the time it takes to perform the tasks required to produce the product. It has traditionally been regarded as the Holy Grail.

In the past, very little attention has been paid to chronological time, yet this is where huge improvements can be made in order-driven businesses. Reducing the time it takes to process an order from a quote to cash is effectively cutting lead time or *customer wait time* as we like to call it. And the less time it takes you to service a customer’s need, the better.

The following graphic illustrates the results of a study conducted at a tool and die shop here in Michigan. You can see that almost 90% of the total time this job was in the shop, *it was not being processed*. Focusing on “wait time” and working to reduce it will have a far greater impact on improving performance and competitiveness than trying to reduce task time. As the old saying goes, *Fish where the fish are*.



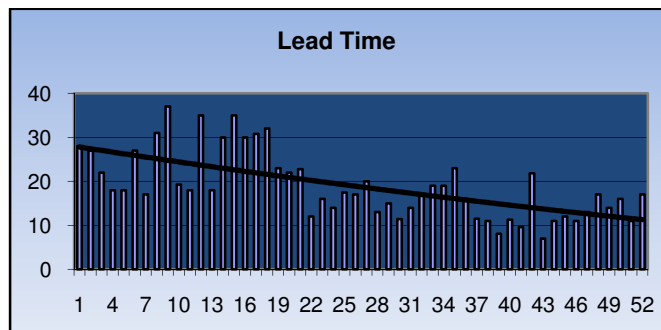
Building an effective organizational infrastructure. *Organizational infrastructure* refers to the system of planning, control, and evaluation tools required for managing the quotes to cash process. The infrastructure is built on this foundation which is how the business converts market demand into supply and ultimately cash. This is the “natural way” the business functions. It’s important to recognize this and develop your infrastructure accordingly. Infrastructure includes organization design and staffing; education and training in the art of managing order-driven businesses; effective leadership; and a viable business strategy. Technical proficiency and keeping up with technology are essential.

Managing with Data In the good old days of seat of the pants management, most owners relied on gut feel to know how their businesses were performing. They may have looked at financials once in a while, but managing with data was not part of their M.O.

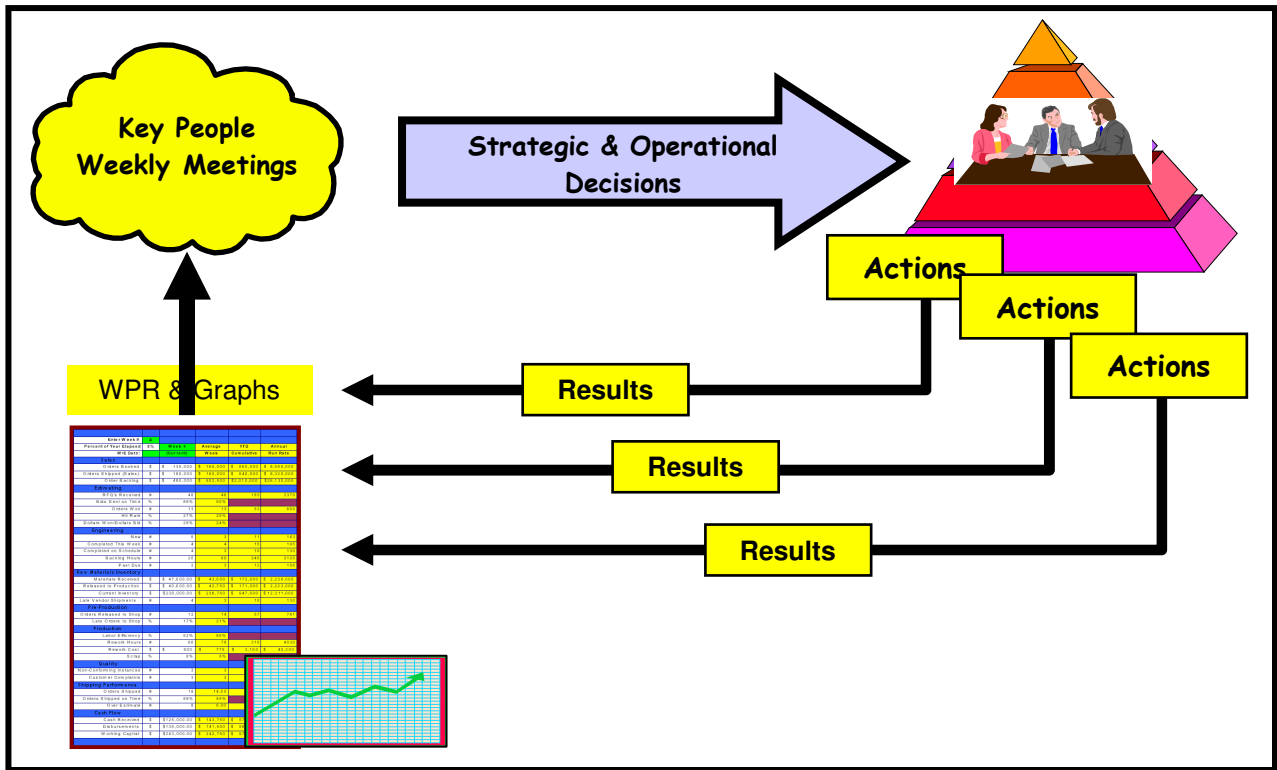
This is no longer possible. In today’s world where organization performance makes the difference between a profitable business and an upside down business, having accurate and timely information about business performance is essential. Recognize that lead times today are compressed, margins are earned, customers are more demanding, organizations more complex, the craft model is being replaced by the production process model, and having a detailed, timely knowledge of what is going on in your business is crucial. You can’t have this without a well-constructed information processing component of your infrastructure that is designed to support performance analysis and decision making.

Using performance feedback to drive continuous improvement One of the tools we continuously promote is the installation of a *Weekly Performance Report (WPR)*. The WPR is structured to reflect the job shop business process from sales through shipping and collecting accounts receivable. This horizontal process model is a significantly different compared to a functional organization (i.e., as depicted on an organization chart.) as we discussed previously. When you view and manage your business as a process, you will be in a much better position to pinpoint areas for improvement, act on them more precisely, and direct continuous improvement initiatives.

The WPR is published weekly so acts as an "early warning system" to detect problems and negative trends so you can act on them before they become more severe. The information provided by a WPR is a leading indicator of the monthly income statement that follows. When a series of good performance reports indicates a healthy business process, the financials will follow suit. Key metrics are graphed which shows longer-term trends and the impact of continuous improvement efforts. For example, this graph shows lead time reduction over the course of a year in one shop from 28 to 12 days on average.



Information typically included in a *Weekly Performance Report* can be operational (number of orders shipped on time); dollars (value of orders shipped during the week); or percentages (on time ship performance). The WPR is aligned with the income statement, and foreshadows it. This graphic shows how the WPR is installed in an organization to drive continuous improvement.



Closing the Loop: Another major source of learning from feedback is what we call “closing the loop” or performing *post mortems* on completed jobs. Strange as it may seem, it is not uncommon to find companies that lack the systems and information required to know whether money was made or lost on an order. If you are not routinely comparing actual costs to the estimate on at least a sampling of orders, it is impossible to focus problem solving and continuous improvement on specific areas of need. *Were materials costs higher than estimated? Did we have more scrap than expected? Was the actual shop floor routing different from the one used in estimating? Were our labor costs higher than estimated? Why? Did we underestimate or miss a process step?* Without proper information, these questions go unanswered and can happen again and again, order after order, without being corrected.

Summary: *Speed to Market* is a system of education, concepts, tools, and practices that are necessary to manage an order-driven business in such a way that its performance and profitability continue to improve. It begins by *understanding differences between build-to-stock and make-to-order business models*, and how order-driven businesses are managed. Because most business management education and literature assume that manufacturing is all mass production, there may be a significant amount to unlearn.

Speed to Market incorporates the *concept of horizontal management* which fits the quotes to cash process that is characteristic of job shops and similar order-driven businesses. Once you recognize you are managing a process and not an organization chart, the next step is to *identify and eliminate delays in that process in order to cut lead time*. This requires *understanding the difference between task time and chronological time* because major improvements come through reducing the latter. This does not mean that you ignore task time, only that you expand your understanding of time to include the chronological.

Managing with data and using performance feedback to drive continuous improvement are equally important. Without accurate, timely data it is impossible to stay on top of the dynamic nature of any business. Nothing stays the same, and if you do not have the ability to monitor and analyze performance, you are at a competitive disadvantage you cannot afford in today's difficult business environment. But it's not enough to know what is going on, you have to be able to feed that information back to the organization in order to drive continuous improvement and foster learning so the organization as a whole performs at a higher level.

About the Author: Vincent Bozzone has generated millions of dollars in new revenues and earnings for companies as a result of his ability to conceive, plan, and implement solutions for a broad range of strategic and operating problems. He has led, or participated in, more than 600 engagements with Fortune 500 corporations and privately-held firms in manufacturing, financial services, health care, transportation, distribution, and service industries. He is the president of Delta Dynamics Incorporated, a firm he founded in 1991 to provide job shops and custom manufacturers with expertise and hands-on implementation support to improve performance and profitability in a lean manufacturing world. He is the author of *Speed to Market: Lean Manufacturing for Job Shops*, and has written many articles for professional journals and business publications, a chapter in the Handbook of Organizational Consultation, and two books on international business. He is an MBA graduate of Columbia University, the Past President of the Association for the Management of Organization Design, and lives in Bloomfield Hills, Michigan. For more information, visit www.deltadynamicsinc.com