

On Time And On Budget Does Not Equal a Successful Software Implementation

CAREFUL PROCESS DESIGN, STONG PROJECT MANAGEMENT, AND PERFORMANCE MEASUREMENTS ARE REQUIRED TO ACHIEVE YOUR PROJECT GOALS.

This article examines how the implementation of distribution software can achieve or exceed its goals only when project management basics and critical measurements are combined. It describes some project management basics, and guidelines for measuring results, and provides an example of how planning to measure your results can lead to achieving those results.

SOFTWARE CHANGE WITHOUT PROCESS CHANGE CAN LEAD TO FAILURE

From 1999 to 2002 vendors sold, excluding installation and training costs, more than \$15 billion in supply chain management software.¹ Notwithstanding such large investments, the results have been mixed, and companies often experienced higher than expected implementation costs. Software implementations, even if done well, cannot fix basic problems in your processes. Software systems can even make matters worse if a software change is implemented in lieu of correcting a broken distribution process. When it comes to automating bad processes, software merely enables faster flow of bad information.

A recent analysis² indicated that about two-thirds of companies that installed software to improve their supply chain realized improved metrics such as inventory turns (it was common to see 100 to 150 percent improvement within two years). The other third, which experienced unsuccessful implementations, actually achieved worse performance than firms that did not implement software changes. In other words, poorly conceived software implementations can hurt you more than doing nothing at all.

How do successful firms ensure that software implementations will enable them to successfully achieve their goals?

- **Pre-Project Analysis of Existing Distribution Procedures**
- **Solid Project Management**
- **Measuring Results is Top Priority Throughout Project**

IF IT IS BROKEN, FIX IT

As you review your distribution processes, focus on the broken processes that will give you the biggest return. By doing this you can often avoid a massive re-design and simultaneously improve your chances for success.

- **Benchmark.** With some advanced preparation you can benchmark your existing operations and be ready to measure how your operations have changed after the implementation.
- **Incentives.** If the incentives a person gets run counter to what you are trying to achieve, the best planned project will not be successful. Make people accountable for achieving the results you want.

- **Plan to Measure.** Determine how you intend to measure your results as you design your solution. This is one of the most overlooked points when implementing changes to your distribution processes. Without taking the steps to identify how you will measure your results, you will be unable to measure your success or to make the adjustments necessary as circumstances change.
- **Map Out Your Formal and Informal Processes.** Include those parts of your distribution process that are disconnected from your present systems.
- **Link Goals to Corporate Objectives.** As you review your existing distribution processes you must do it in the context of your organization's objectives. Review your internal and external circumstances and design your systems for where you anticipate your operation going in the future. Do not be afraid to use industry experts to review trends, define state of the art solutions, and recommend best practices.

PLANS ARE WORTHLESS, BUT PLANNING IS INDESPENSIBLE³

Every company that implements software to improve distribution operations should follow these basic project management principles to ensure a smooth implementation and increase the odds of achieving their business objectives:

- **Appoint or Hire a Strong Project Manager.** This person will need to be a strong leader and a good communicator that understands your business needs and can deal with all parts of your organization. Make sure that your software provider also has a good project manager that has experience in your industry.
- **Take the Time to Develop a Functional Specification.** Define what your expectations are and how your operations, maintenance, and Information Technology (IT) people will work with the system. The functional specification will define the benefits and the deliverables. It will also define what is included and, perhaps more importantly, what is NOT included in the project's scope.
- **Let your Operations Lead (And Demonstrate Your Support).** The Operations portion of your business should lead the project, not IT, or Finance. Although these groups will be important to the project's success, it is the operations group that must live with and measure the results of the project. Make sure that all parts of your business are represented on your team, but without a noticeable display of executive commitment the project will suffer.
- **Perform a Risk Analysis.** This is easier than it sounds. The team should carefully and comprehensively identify the risks associated with the project and develop realistic contingency plans.
- **Keep Need Alive.** Make sure that everyone, from the Director of IT to the warehouse manager, understands the project's goals. Just coming in on time and on budget is NOT good enough. The project can only be considered a success when it has delivered the improved accuracy, efficiency, labor savings, or service improvements that you target.
- **Time for Training.** Ensure that the training needs are considered as part of the project plan. The target results expected from a carefully designed process, whose implementation is managed well, can be delayed or reduced by inadequately or poorly planned training.

YOU CAN'T MANAGE WHAT YOU CAN'T MEASURE (OR WHAT YOU MEASURE IS WHAT YOU ACHIEVE)

Most executives would agree that Return on Investment (ROI) is an important factor in measuring the success of a software implementation, but how do you measure ROI? Can you just accept the claims of your software vendors? A research survey of 200 managers concluded that 38% aren't influenced by vendor claims of ROI, 54% are somewhat influenced and only 8% put a lot of faith in what vendors claim⁴. You need to put your vendor's claims and your own assumptions to the test.

It is easy to establish your goals at the start of a project but much more difficult to measure your results after implementation.

Below are suggestions for how to successfully measure your distribution software project's success. Follow these suggestions to help you prepare for a software implementation that will succeed and achieve your business objectives:

- **Set Concrete Expectations for Investments Before Approval.** What are the specific items that you wish to measure? Productivity? Accuracy? Throughput? Determine what they are and plan at the **start** of your project how you intend to measure them.
- **Don't Forget to Measure "Softer" Items.** Don't disqualify a project just because you lack hard data. The lack of specific numbers can leave a worthy project, for example one that can improve your Customer Satisfaction, on the bench and give your competitors an advantage.
- **Focus on Your Customers.** Although it is natural to set targets for metrics that directly correlate to your day-to-day operations, such as reducing the number of "touches" or "labor productivity", also target broader revenue or profit goals. Consider measuring how often orders are shipped completely and accurately, or perhaps the reduction in an order's cycle time as well as your reduced labor costs.
- **Communicate and Correct.** As your project gets underway, establish periodic communications and specific milestones. Monitor results and take corrective action if necessary. Big problems start as little problems, and little problems are much easier to correct.

Deal with Murphy's Law.

Notwithstanding your best-laid plans, the unexpected will occur and your expectations may not be met. The root cause of unmet expectations must be determined. Ask:

Have internal or external circumstances changed?

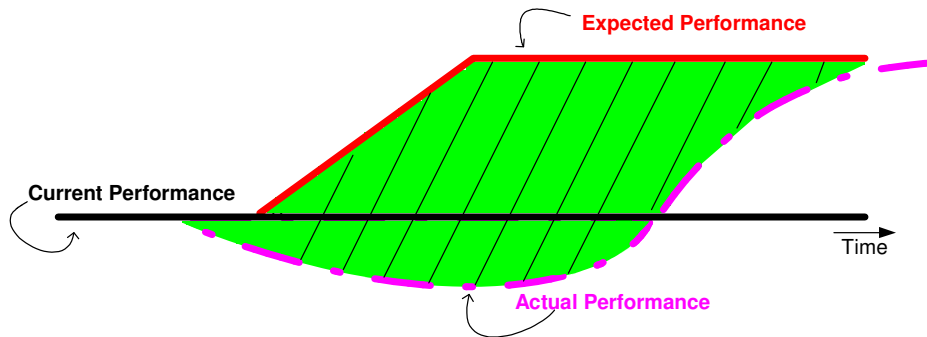
Is the process properly designed?

Are you actually following the process as originally designed?

Unless you have a way of measuring your results, you will be unable to recognize performance that is trending worse or whether your corrective actions are being effective.

A common flaw when managing a project is to assume that the benefits of a new system begin on day one. The top line in the chart below illustrates the expectations of most people when implementing a new system. In reality, most systems undergo a learning curve⁵. The dotted line in the graph below illustrates a more realistic performance that is more typical of a project that requires multiple groups to work together, time for training to take hold and for

procedures to be adjusted as circumstances demand. Even in the most successful of



implementations, performance will often get worse before it gets better. Without the ability to monitor and measure progress, however, you can only rely on broad indicators and anecdotal evidence.

AN EXAMPLE OF GETTING IT RIGHT

The Goal

SaraMax Apparel Group is one of the largest privately held branded and private label undergarment manufacturers in the United States. In 2002 they decided to relocate to a new distribution center for increased capacity and to enable the implementation of technology and practices to improve distribution operations.

As a distributor to Wal-Mart, SaraMax adheres to strict vendor guidelines related to delivery schedules and accuracy. SaraMax desired the honor and benefits of making Wal-Mart's DSDC (direct store distribution center) supplier list. To make the DSDC list, they needed to simultaneously:

- Improve Turnaround Time
- Improve Accuracy
- Increase Capacity by 100%

To meet the accuracy, throughput and deadline requirements with the manual paper-based practices that existed at that time, SaraMax would have incurred significant labor costs. SaraMax examined their existing distribution process and considered a multitude of automation technologies before they settled on their final design.

The Right Steps

SaraMax took some early steps that would be crucial to their successful implementation.

- Appointed a Strong Project Manager
- Had Executive Commitment and Involvement
- Critically Evaluated their Processes
- Designed their System with the Ability to Measure Results

During this large and complicated project, which involved construction, material handling equipment installation and software implementations, there were numerous distractions and demands on the project team. Despite the issues that inevitably arose, the team stayed focused on their ultimate goals and never lost sight of the following items:

- Measure Productivity and Accuracy of Operators
- Focus Training Efforts
- Ensure Orders were Released with Accuracy Approaching 100%

By using productivity reports, SaraMax was able to determine, soon after implementation, that errors in replenishment were causing errors in order fulfillment. By identifying the issue while it was still a small problem, the team put together and executed a plan that successfully addressed the issue before it adversely affected their business. They also began to benchmark their new operation with the expectation that any further adjustments to how they worked could be measured against these values and corrective action, if necessary, could be undertaken.

The Results

Using AL's DynaPick Pick-to-Light solution, SaraMax now processes greater than 50,000 units per day (7.5-hour shift) at an accuracy rate of approximately 99.75% (before auditing). After auditing (between 10% and 50% of orders are audited using four audit stations), orders are effectively fulfilled on a 100% basis. Three months after implementation, SaraMax was chosen to Wal-Mart's DSDC list. By planning to measure their actions, and then act on the results, SaraMax has achieved their goals and has the tools in place to adjust to a world where circumstances can and do change.

CONCLUSION

You can enjoy the benefits of the successful implementation of distribution software by applying strong project management principles, avoiding making software changes in lieu of fixing broken distribution processes, and by focusing on the measurement of performance as an integral part of your design.

A project that comes in on time and on budget is not successful if it does not deliver on its promised goals. Ensure the success of your project, and perhaps your business, by taking a tough look at how you operate today, putting in place the tools you need to measure your success, and applying the discipline to stay focused on why you began the project in the first place.

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¹ McKinsey & Company; www.mckinseyquarterly.com The McKinsey Quarterly, 2003 Number 1

² Ibid

³ From the full quote "In preparing for battle I have always found that plans are useless, but planning is indispensable". Dwight D. Eisenhower (1890–1969), U.S. general, Republican politician, president. The Columbia World of Quotations. 1996.

⁴ InformationWeek Research ROI Study of 200 IT and Business Professionals; www.informationweek.com/thisweek/story/iwk20010803s0003

⁵ Learning Curve is a graph that depicts rate of learning, especially a graph of progress in the mastery of a skill against the time required for such mastery. *The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2000 by Houghton Mifflin Company.*