Software Implementation Disaster Avoidance Guidelines

What percentage of major software implementations with which you are familiar resulted in a disaster fraught with cost overruns and missed deadlines or worse, outright failure?

Unfortunately, most of us come up with a failure range of 60% or higher.

In many cases this woeful scenario is actually an expectation, something with which to be reckoned and at best controlled. The next question to ponder and ask is “Why is this so?”

When was it written that we must fall victim to the perils of an ERP/MES/AIS/WMS implementation? The answer is never! Therefore this essay is devoted to the fundamentals of a successful software implementation.

The primary catalysts for a major software implementation are either the need to improve operations with a goal to save money or expand capacity to increase market share—or both. Chances are that manual operations need to be automated or capacity increased for improved throughput. We can assume this is a given and move to the all-important process of software selection. This is the most critical stage of a major software effort. Software selection should not be rushed, shortcuts should never be taken, and should be a merciless undertaking for the vendor peddling their wares.

**Disaster Avoidance Guidelines**

**The following principles are common sense and commonly overlooked.**

1. **Determine the need and spread it throughout the organization.** Everyone in your organization needs to have a clear idea of the objectives. They have to realize the reason for the upheaval. This is just as true for your Information Technology Director as it is for your Warehouse Manager. From the top executive leader on down, *keep the need alive.* If it dies, so too will the implementation effort.
2. **Form a team that meets at regular intervals.** Participative Management and Cross Functional Collaboration are often used buzzwords that are not often practiced in reality. Bring in your Accountants, Logisticians, Operations Managers, Technologists, and above all, selected targeted users of the software. The team has to realize that the entire organization is connected—an initiative intended to help the tactical Return on Investment (ROI, an estimate of the financial benefit on money spent on a particular alternative) for a tactical operation could bring down the Strategic Economic Value Added (EVA, the financial performance measure that comes closer than any other to capturing the true economic profit of an enterprise) of the firm.

A classic example is buying more stock to improve customer service. This is good for the sales person but puts a strain on the warehouse manager and increases the cost of operations. A “connected” system will predict the most efficacious mixture of customer service, inventory, and operations.

3. **Select a Champion and make this person omnipotent in your organization.** Everyone in the aforementioned team is putting out fires most of their time. Your champion’s sole fire is the project. This person has no other focus. He or she will keep the team focused and bring them in when required. Your champion has the ear of VITO—your Very Important Top Officer. Upset the Project Champion and you upset VITO. Nuff said.

4. **Hire a 3rd Party.** No one can be as objective as a Third Party acting as an Integrator, Umpire, Translator, or Consultant. An Integrator can help weave together potential interdepartmental rivalries, synthesize possible multiple software solutions with disparate architectures and/or platforms, and distill all anticipated benefits from your software implementation across all business units and standardize across the enterprise. The Umpire will match your very different agendas--the software vendor is looking for your money and your signature on the dotted line. If you have this person acting as a Translator, you will understand what the software peddlers are telling you, and the software peddlers will understand your needs. You are looking for a solution and often bleeding edge technology. A Consultant by definition gives expert or professional advice. This contract employee will keep you from redesigning a wheel or keep you out of harm’s way. You really need an objective 3rd Party.

Your Third Party Hired Gun will also know the right questions to ask. This is worth his or her weight in gold. Mr. or Ms. Third Party and Seymour (Seymour always wants to see more will weed out your unfavorable vendors with ruthless efficiency.
5. **Know the ROI.** There is always a Return On Investment (ROI). You should have a general ROI expectation in place before you begin your project. Let your hired gun help determine this very important calculation. Do not bother to let your potential vendors perform the ROI analysis. They usually arrive at a calculation that easily and generously endorses their product and all of its associated costs.

Keep in mind your firm’s Economic Valued Added (EVA) mind to make up an ROI’s incomparability among divisions. EVA is net operating profit minus an appropriate charge for the opportunity cost of all capital invested in an enterprise. As such, EVA is an estimate of true economic profit, or the amount by which earnings exceed or fall short of a required minimum rate of return.

It is difficult to capture all costs and payoffs of any large project, especially one as unpredictable and often terrifying as a major software implementation. Albert Einstein once said that many times things that can be counted do not always count, things that cannot be counted often count. Go back and read that last sentence again. Keep this in mind while evaluating your ROI. You will have to make some assumptions.

Use the ROI as a budgetary variance tool. During your reviews you need to keep track of budgeted and actual costs. This is critical in keeping a project within budget, monitoring for adjustments, and knowing how well your team and / or the vendor is performing.

6. **Budget for all foreseen costs.** This is easier said than done. You will need to look at additional seat costs associated with your operating system, database management system, reporting and label producing applications, and technology such as wireless applications. Cost-Creep will produce Budget Creep, which often spells D-I-S-A-T-E-R. The aforementioned 3rd party can come in handy here.

7. **Document your processes.** If you have not done this, do it now. Let the Third Party help you. If your processes are being documented at different sites, sit back and get ready to discover the multitude of process variations for the same, well, process. You may get a lot of bang for your buck here. Let the Third Party help you distill the best processes and merge them all together in a “Best Practices” process manual. Now you have a documented methodology to present to the software vendors.

8. **Document their processes (and functionality).** Their functionality needs to match your process as closely as possible. Avoid customization as much as you can. The very best vendors know the very best way to do things because they have the very best customers. They have taken the collective wisdom of their customer base and programmed it into the software. Consider changing your process to fit the software if it makes sense. Remember how much you can learn from the vendor’s customer site visits.
9. **Make your Selection based on:**

   a. **The Software and the people who make it work.** You are buying the people too. They are part of the solution. If they do not work or play well with others, neither will their software. If the vendor’s sales representative does not have a contagious passion for their software, then meet the Product Manager. If you do not get the comfort from this person, send them away.

   b. **The Voice of the Customer:** Unless you agree to be a Beta Tester, you need to see at least two very happy users of the software under evaluation. Happy customers will tell you all you need to know. If they are truly happy, they will let you in and praise the application. Most of the time they do this out of gratitude for the vendor. If this cannot be done, send the vendor away. Make no compromises on this one.

   c. **Industry Knowledge.** There are a lot of software vendors, and at present the vendors are loaded with technical talent and industry experts. This is primarily because the recent soft economy yielded a glut of such talent and expertise. As you identify vendors, send out your RFIs and RFPs, and ultimately produce your short list, it pays to know that it is a buyer’s market. Consider Warehouse Management Systems (WMS) for an example: There exist more than 200 purveyors of WMS software. Many have been around long enough to be far to the right of the learning curve on general WMS functionality—and just as importantly, vertical expertise.

   Select vendors that target your industry vertical. Major verticals include: Apparel, Retail, Automotive, Food / Beverage, High Tech (electronics), Commercially Packaged Goods (CPG), Pharmaceuticals, Third Party (Contract Warehouses, Private) or Third Party (Largely Public). Any vendor that professes to “do it all” most often cannot. Most vendors target a specific set of verticals (two or three) and excel in those areas. Stick to the vendors that specialize in your industry. An added bonus emerges when you make your site visits at the vendor’s customer facilities. It usually brings you up-to-speed with new initiatives and strategies in your industry.

   d. **Seymour.** Listen to Seymour. Vendors want to sell to a dumb VITO—the one who will say yes when everyone else says no. Let Seymour get into the details not matter how long it takes (but keep Seymour on schedule) or how much it will exasperate the vendors. If the software vendor cannot handle the relentless barrage of questions from Seymour, send them away. Seymour will make your project a success every time. Keep VITO away from the project, except to keep people in line who do not cooperate with the Project Champion, and perhaps to sign agreements.
10. **Hold a Conference Room Pilot (CRP) or Functional Demo.** Believe it or not, this is easy to skip and it is often the case. If you skip this very important step then get ready for trouble. Even the most well meaning and best intended vendors will not be able to nail down 100% of your requirements during a demo. Nor will you and your team be able to adequately judge the software being scrutinized.

Only a long and tedious CRP will guarantee your project's success. Any software shortcomings will reveal themselves and this is an important first step of the “Discovery” process—where they truly begin to understand you and vice-versa. This is also where you and your vendor make the determination where their shortcomings and resultant modifications are either Product or Custom. If product, you do not have to pay for the modification since it is a general industry requirement. If custom, the modification is unique to your business and will drive up costs and raise myriad support issues. Your hired gun will come on very handy in this process.

11. **Invest in a lot of training.** Too many of us skimp on this item. There is almost never too much training. A new software implementation is often a cultural shift in your firm. The best way to evolve your people into the new processes, rules, and often accountability is to empower them with knowledge. It will also save you money. If you want to save money by cutting training, you will have to pay double later for every dollar “saved” today.

Do not forget to budget time for testing and a rollout plan. Nothing will hurt more than turning the application on at multiple sites and discovering a potential show-stopper.

12. **Keep looking back.** Hold your scheduled reviews and never keep a bad project moving. Put it on hold when you have to or know when a sunk cost is sunk. Killing a project may be the hardest thing you will ever do as a professional. However, it is better than pushing a project doomed to failure--failure being measured by poor software or lack of project management, either or both leading to missed deliverables and insurmountable and often unforeseen obstacles.
Here comes item number 13 and it is a big one:

13. **Never let VITO veto Seymour and Mr. or Ms. Third Party.** Almost every time this happens, VITO costs you time and money. VITO can render all of your due-diligence useless. Do not let this happen.

**Final Words**

This essay is not intended to be technical. Items such as fault-tolerance, redundancy, backups, etc. are the topics for another discussion. While many of the above points tend to insult the intelligence of the typical professional, try to bear in mind our collective propensity to take short cuts, play the blame-game, regress to the way things used to be, and build empires. Now many of the “obvious” points become vulnerable.

Pundits are predicting that our soft economy will gain momentum some time during 2003. Stingy CFOs are going to allow projects to commence that have been in abeyance for months or years. Therefore, it is with sincere hope that this essay will help to assuage disasters waiting to happen.

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