White Paper

Getting Real Results From Your Technology Investment: True Business/Technology Integration

By Scott Moshier, PMP

The Problem – Technology Still Struggles

Although information technology is woven into the fabric of all business processes today, many organizations still find it difficult to get the most out of their technology investment to drive innovation. Also, IT managers still find that they have to prove their value. This credibility gap is described in a November 2004 Informationweek.com article that reports on a Forrester Research survey, "…only 41% agree or strongly agree that IT serves as a source of innovation within the company. Similarly, 40% agree or strongly agree that IT adequately focuses on the needs of their companies' customers". (http://www.informationweek.com/story/showArticle.jhtml?articleID=53700637)

The largest barrier to using technology to drive innovation is the divide between what is commonly referred to as the "technology-side" and "business-side" of organizations. In recent years, many strategists, consultants and academics have acknowledged this gap by recommending that technology professionals, "…need to work more closely with their business counterparts…". This advice is so common that virtually any IT professional will assert that he/she is doing his/her best to work with "the business". Whether it is real or imagined, this perception that technology is somehow separated from business processes significantly impacts the organization. There continue to be disconnects in many organizations that manifest themselves in a number of ways, for example: as a lack of understanding of the technology used by the business or as an "us verses them" attitude toward the IT staff.

Historically, most IT staff have been isolated from the operations of the business in a number of ways. This is often times formal (i.e.: a separate department) but can also be informal (i.e.: not involving IT in operational business discussions). In many cases, IT professionals themselves have also encouraged this isolation by having an attitude that advancing technology itself would solve business problems. Also adding to the isolation was the infancy of many technologies and the need for IT departments to spend their time keeping the network or applications running and fixing bugs. Over the last few years, however, many technologies have become stable and most business leaders understand that there is no technology "silver bullet".

The Solution – True Business/Technology Integration

In order to gain the most utility from the organization's IT infrastructure and close the credibility gap described above, it is imperative that IT professionals take an active role in helping run the company. In short, they need to learn much more about the business that they support rather than relying on learning the latest

technology advances. Dell's CIO highlighted this point in a September, 2003 CIO.com article: "You have to realize that the IT job is not just a technical job. It's really about a third business acumen, a third technical skills and a third leadership," says Dell's CIO, Randy Mott. "The first thing you have to do is change IT's mind-set away from thinking, the only thing I have to worry about is having technical skills. How you work with business partners and understand the business you're in takes technical skills and leadership skills." (http://www.cio.com/archive/091503/development.html). Therefore, only by applying technical knowledge in context of a deep understanding of business processes will technology be able to add the most shareholder value.

The challenge in getting your IT staff to really understand your business is to get them away from their computers and participating in the company's business decisions. Here are a few ways to do this:

- During the hiring process, identify those candidates who enjoy learning and solving problems...not just those who know the latest technology.
- For existing staff, get them involved in planning and problem solving meetings. Just like marketing staff doesn't know everything about operations, the technology staff doesn't need to know everything about the business. However, they need to be at the table when solutions are being discussed to provide input related to the technology impact.
- Implement a basic incentive program based on business goals. This will help encourage the IT staff to think about how to help achieve business goals.
- Keep the IT staff informed of business milestones and progress. Repetition reinforces the culture to be involved in the business. If IT staff hear about goals and plans only once or twice a year, they will not really feel like a part of the business.
- When possible, physically locate technology staff with the area they work with the most and/or support. Proximity fosters the development of informal relationships which, in turn, creates a better working relationship for everyone.

Comprehensive Technology Implementation

In addition to being integrated with the business, the IT staff also need to approach technology implementation (either development or procurement) in a new – more integrated – way. Whether your company develops its own software in-house or purchases it, the system requirements are the central focus of every IT manager. While it is very important to clearly identify the system requirements (which can be a challenge in itself), it is also important to step back from the specific system and look at the big picture. That is, there needs to be a process to look at the new technology implementation in the context of the whole organization and identify any ripple affects on related systems or processes. Some things to consider are:

- Identify the systems or processes that depend on data from the affected system. Many times a system may provide a data extract or be linked to another system that may not be readily apparent during the requirements definition. Communicating outside the IT department and primary users is critical to ensuring that something is not overlooked.
- Question current business processes. Is your process driven by the system (or data) that is available? If so, how will a system change impact that process? Many people believe that changing systems will not affect the larger business processes. However, many vendor systems are built on assumptions that businesses do things in a certain way. Implementing a different system may either enable or require an organization to change its processes to effectively use the new system. Depending on the change, this could be good or bad. However, unless it is addressed up-front, it will certainly cause pain and confusion for the organization.
- Compliance Issues? Although this should be addressed in the system requirements, compliance requirements may not be known to everyone involved in the project – especially the IT staff. With the introduction of Sarbanes-Oxley and HIPAA (Computerworld.com - http://www.computerworld.com/databasetopics/data/story/0,10801,98232,00.html), many businesses are affected now more than ever. Since the person who holds the role of compliance officer may not be always involved in new technology implementation, it is critical to communicate (at least in the beginning) with the organization's legal council and/or compliance staff.
- Outside factors need to be identified and considered. There may be a variety of other factors that may affect the implementation of new technology but are not always tangible. This is where good judgment and business (and sometimes technology) acumen play a large role. This is because it is not always known if outside factors will really affect the technology or to what extent. Further, there is a calculated risk in planning for the affect of outside factors on the technology implementation. Therefore, these have to be considered on a case-by-case basis and judgment calls made about each. Some examples are:
    - Technology obsolescence – Since the IT industry changes so quickly, a current technology may become obsolete quickly. Therefore, your IT staff need to keep pace with what is happening in the industry and factor this into the decision-making process.
    - Infrastructure limitations of your partners – If your company needs to work with other organizations, it is necessary to understand their limitations. For example, a system that generates large data files for your vendors may not work if your vendors only have a 56K dial-up connection to the Internet or your system.
    - Organizational or political considerations – Sometimes these considerations are obvious and other times they are not. Experience within the company and understanding the personalities of decision-makers are key in factoring in these intangibles. For example: a large investment in a robust solution may not go over well if the decision-

maker is known to not value investments in technology. In this case, a better approach could be: a more bare-bones solution; or working with a decision-maker's peers to influence the decision.

Overall, there is no "silver bullet" to implementing new technology and driving innovation from it. It just takes hard work. However, creating an environment where IT professionals are expected to be part of the business and considering more than just system requirements will maximize the value gained from each new technology implementation.

About the Author:

Scott Moshier has been leading IT projects for over eight years and is certified as a Project Management Professional (PMP). He has successfully implemented new technology in a variety of industries including: travel, financial services and government. He is also the managing partner of an Indianapolis-based IT consulting firm, Real Results Consulting, LLC. In addition to leading out IT projects, Scott has come from an operations background where he increased the efficiency of business processes. He has a bachelor's degree from Purdue University.