

High Impact Projects

A Newsletter About Getting Important Things Done.

How to get what you need from Information Technology

Part III: More Tips For Non-Technical Executives

“Don’t even try to become technically smart – it is not practical. Using ‘fact-based-management’ and other straightforward management concepts can dramatically improve the business results of any IT organization you will oversee.”

Tom Ingram, PMP

How can a non-technical executive possibly oversee something as complex and convoluted as an Information Technology department? The surprising words above come from Mickey Houston, President of Brierley & Partners Advertising Agency of Dallas. Houston started his career as a software developer, progressed through various roles at EDS and Ernst & Young, and recently was named President of Brierley & Partners.

Mickey spent most of the previous two years as Chief Technical Officer for Brierley. I find his comments interesting because he has the perspective of both a general manager and a technology manager. His insights, discussed below, provide some fresh tools and some encouragement for non-technical executives that must oversee computer departments.

Q: What general suggestions do you have for the non-technical executive trying to “slay” the IT “dragon?”

A: It is rare to have the technical skills and leadership/management skills reside in a single person. Rather than trying to be all things to all people, I would suggest that executives understand the full spectrum of skills needed to effectively oversee an IT organization.

Necessary key skills include business skills, process skills, project management skills, financial

skills and customer service orientation. It is also important to understand that technical skills break into two major categories.

The first I’ll call “Development” skills. These are the skills needed to create new solutions to business problems. Those skills might range from programming to picking the right software package to using off-the-shelf hardware – all with the common element of solving a pressing problem.

The second skill set I will call “Infrastructure and Maintenance.” These are the skills necessary to keep things running and fix them when they break.

It is important to understand that the leadership team will need all these skills. If you have a skills gap you will almost certainly be hurt by that lack at some point. Note also, that some of your people may have inherent strength in, for example, infrastructure / maintenance skills but be seriously deficient in development skills.

Avoiding The “Cost-Thinking-Only Trap”: It is a mistake to focus purely on cost, and this is certainly a trap that financially oriented executives tend to fall into. Short term cost constraints can have devastating long-term impact on maintenance costs, turnover and the capacity to respond to business priorities.

A First Step – Conduct Your Due Diligence:

You will need to get your leadership team in place with the skills discussed above. You will want to think through the major IT functions at present. What is going right, and what is not going right?

You will want to understand what I call your “Systems Map.” You should be able to understand what the major pieces of software are that your organization depends on. You should understand, at a very high level, why the organization needs this software. Some systems you will buy. Some systems you will develop in-house. Some systems you might outsource. Some key systems might be fairly simple infrastructure applications - such as email.

It is also important to think through the centralized control versus decentralized autonomy issue. (Both approaches carry their inherent risks.) I am certainly not advocating that you understand these things down to the bit and byte level. You do need to understand them at least to the degree that you can make sensible cost/benefit judgments when you are presented with alternatives and options by your staff.

Avoid the Maintenance and Integration Cost Trap: These costs can be enormous, hidden and accumulate over time to the point where they are quite a problem. You will be tempted to save money in the early days by taking the least cost, most rapid path to solving the pressing problems of the day. Down the line, however, these shortcuts can create enormous customer service problems and maintenance costs.

I would advocate that you get clarity on the strategic priorities of the business. Spend money, time and appropriate due diligence on the systems that produce the greatest value in moving forward on the strategic goals of the business.

Q: What is “benchmarking” and how would you make use of it?

A: Benchmarking is simply taking a look at the high level measures of similar organizations to see what you can learn about your own. I find percent-of-sales spent on Information Technology to be an extremely valuable metric. If I am spending significantly less on IT than my competitors, I need to understand why. If I am spending more than my competitors, I need to make sure that those expenditures are producing a justified payback. This measure is also very helpful in setting realistic

expectations for what systems can and cannot do, including how much it will cost. (Very helpful with bosses and peer organizations.)

Benchmarking can also help me understand how I am allocating my budget within my department. Some IT departments will spend as much as 80% of their budget simply to maintain the systems that they have. This leaves very little capacity for enhancements to move the business forward, and you will probably lose competitive position over time. It is also very helpful to know how similar organizations have grappled with the tradeoff between “keeping the old stuff running” and “buying new toys.”

Avoid the “No Level of Service Defined” Trap:

The trap I’m concerned about is when an internal IT department fails to have a “level of service agreement” with the other departments it supports. Level of Service agreements include such things as how quickly your organization will respond to failures, percentage of uptime guarantees, how quickly you will respond to requests for enhancements and new systems, etc.

One of the reasons for the push to outsourcing over the last few years is that outsourcers have a profit incentive to clearly define these levels of service. Many internal IT organizations never get around to establishing clear agreements with their internal customers - they tend to respond to requests based on either the good-old-boy system or who screams the loudest. As a consequence, outsourcing organizations appear to be much better run because they can demonstrate and guarantee the levels of service that they provide. This is no great trick, and you can certainly do it yourself.

Set Expectations With Your Boss and Peer Organizations: Life in IT holds two guarantees: You will have trouble and technology will evolve. In many ways, IT is a world of unrealistic expectations and solving the problems of falling short of those expectations.

A manufacturing plant can be set up and run for 30 years with minimal changes. Contrast this to what has happened in IT during the last 30 years. At the highest level we have seen transitions from mainframe to mini-computer to personal computer to networks of personal computers to the internet over the last three decades. This level of change would be

equivalent to replacing nearly every piece of manufacturing equipment in that plant five times over a period of 30 years.

Strong communications vehicles, cost / benefit analysis and extensive efforts to realistically set expectations can go a long way toward coping with these two inherent facts of life in IT. It helps to remember that the “Ship of IT” is sailing, but it is never finished (and you can’t stop to put in to dry dock!)

Q: How do you make sure that software matches business processes and business needs?

A: This certainly is a tough issue. It helps to think of things in two broad groups - the technical side and the business side. The business side is easy to say, but hard to do. You must evaluate the processes that your systems support across the entire organization. Once you understand (and document) those processes, your task is to match up the most effective technology with the needs of supporting that business process.

The mistakes in this area tend to arise from shortcutting the process investigation, failing to prioritize, choosing the technology solution before you understand the process needs, putting a technically oriented person in charge of what should be a business-driven thought process, etc.

On the technical side, realize that you will be dealing with many vendors. You need to think through the requests you are likely to make of each vendor. You then want to evaluate the probable quality and timeliness of their responses. If you are using major packaged software or have outsourcers as a significant part of your IT department, you are at the mercy of these vendors’ capacity to respond. The quality and timeliness of their response to your requests needs to be a contractual arrangement.

Remember also that an individual system cannot be an island. These systems often have five- and ten-year economic lives and it is almost certain that you will have to integrate with other systems during that period. On your most important systems, the need to integrate will probably become critical at some point.

Remember also that systems need to perform under load! A trap regularly encountered is that a prototype or demonstration system will work fine, but it breaks down or is unacceptably slow when placed under real-world workloads. (Editor’s Note: I

can’t count the number of times I have seen clients caught in this trap. The only reliable way that I know to avoid this problem is to find someone else who has done what you want to do under nearly identical conditions.)

Q: What about staying current with technology?

A: I would never advocate buying technology for technology’s sake. Remember that vendors and marketers have a vested interest in convincing you that your equipment is obsolete. There are, however, very real downstream costs and constraints that can hurt you badly if you get too far behind. It is important to think through the three-, five- and ten-year implications and constraints of your key systems in your systems map.

Q: How do you make sure that software vendors and consultants perform as promised?

A: This is probably the toughest area for non-technical executives to oversee. To begin with, you need to have a clear written agreement on the true expectations.

Avoid the Trap of Picking Software too Quickly:

I have often seen software purchased too rapidly, based on fuzzy or insufficiently detailed requirements. Defining these requirements and choosing the right software is one place where you absolutely must do it right yourself or hire an external party to help you.

Q: What about consultants and vendors that bury you in paper at this stage?

A: Quality is far more important than quantity. Actually, large amounts of paper are counterproductive. You are looking for vendors and consultants that can express a written understanding of your problems, your priorities and what they will do about it. If these documents are too long and involved, people don’t read them. There is also the trap of consultants creating “make work” to keep their junior staff people billable.

Get Vendors to Commit Executive Time:

Make sure that your software vendors have adequate participation from their senior people. Ideally, put this in writing. Often, these senior people will get busy or distracted and things will spin out of control.

(Editor’s Note: I have seen several situations where good, credible software vendors got in serious trouble with their customers because of failures in

their executive oversight. Having a written schedule of executive meetings as part of your agreement with the vendor will prevent many of these problems.)

You also need to make sure that your own executives participate adequately. This is one reason for placing strong emphasis on cost / benefit analysis before prioritizing work on systems. When there is a high payback, and much at stake, executives will tend to participate.

Avoid Getting Burned on Enhancements:

Remember that software vendors and consultants work from standard packages and work programs. If your needs require substantial modifications or enhancements, these must be clearly stated in writing, understood and controlled. Chances are the vendor or consultant performs their standard work quite well. The breakdown in risk usually centers around modifications and enhancements.

Make Sure to Have Clear, Measurable Milestones: One of the biggest traps that I've seen is when the customer does not find out until the end of a project that things are in trouble. The best way to prevent this is to require the vendor (contractually) to provide proof of good progress during the project.

"Milestone" is an easy word to say, but it is an entirely different matter to require your vendor to plan effective, measurable checkpoints in the project. You want points in time where you will have a definitive answer as to whether the promised progress has been made. Toughest of all, your milestone measurement system must survive when the inevitable changes to the project arise.

Reward Vendors for Early Delivery: A trap I have seen (and lived through personally) is that of financially penalizing a vendor for being late on delivering. This places a negative cast on the entire relationship. I much prefer to use financial rewards to incent good performance such as early delivery, delivering under budget and exceeding the quality specified. I've used this with success and highly recommend this approach. It is more than cost justified.

Q: How do you make sure the people in your IT organization have the right skills?

A: The first step is to understand what systems you have and what your key applications are (as discussed above.) This makes it far easier to compare your current staff to the skills that you need.

I always make it a point to have a strong technical person reporting directly to me. I call that person a "technical architect." Even though I am fairly technical, I have many demands and other pressures that limit my available attention. Among other things, this key person communicates to me the skills that we need to have on staff on an ongoing basis and the attitude of the "troops in the trenches." He or she helps me understand the needs of our people at the front line.

Invest in Training Your People to Minimize Turnover: Books, magazine subscriptions and training classes are a relatively inexpensive way to help keep in-house people's skills current with the strategic direction needed for the business. A trap that I have seen others fall into is letting the technical skills of staff people atrophy due to cost cutting. You can survive this on a short-term basis, but ultimately it will result in high turnover and your remaining people will have marginal skills.

You need to realize that technical people can see their annual compensation swing from \$10,000 to \$40,000 a year depending on the technologies that they are current on. They have both an economic and a personal satisfaction incentive to move on to places that dangle the carrot of sexy new technology. If you do not take steps to make your workplace attractive and competitive, you will lose people regularly and incur the attendant cost and headaches.

Q: "We can't afford it": On the whole, it sounds like all this will cost a lot of money. How do you respond to those with cost concerns?

A: My first response is to ask, "Are you are in business niches where the margins are too low? Do you really understand the costs of serving the customers in each or your niches?" Yes, IT is a significant cost component, but it is by no means the only or the largest.

This is one reason the IT department must stay linked to the strategic priorities of the business. Presumably the business is continually looking toward new niches, increasing margins and redirecting resources to the most profitable opportunities. If we don't understand our costs of generating a dollar's revenue from those niches (including IT costs), how can we make rational decisions? This is the value of having a business-oriented person running your IT organization. The

technology mind is rarely going to think in these terms.

Avoid the “Prioritize By Screaming and Yelling Trap”: When departments or powerful people within organizations can jump up and down or scream and yell to get a higher priority from IT, trouble inevitably follows. I have noticed that when people have a rational, reasonable price tag attached to their demands, and a set process for determining priorities, they tend to operate more in the best interest of the entire organization. I recommend using a charge back system. It need not be complex or burdensome to accomplish the goal of matching a cost / benefit price tag to demands.

Q: Any concluding recommendations?

A: I use a “management by fact” technique to help me stay on top of many things. I put a lot of effort into making sure that I have measures (facts) that I understand and can rely on. If the facts are in line, I ignore the area and let it continue to run. When facts or measures are out of line, I put my entire attention on the problems quickly. An example of this would be the milestones used when contracting with a software vendor. I put a lot of work into making sure that the milestones are measurable, meaningful and I can hold the vendor accountable. If the milestones are met, things require very little of my attention. If the milestones are not met, I know I need to engage that problem immediately or it may spin out of control.

A non-technical executive overseeing an IT organization must be able to listen to his or her subordinates. You will need to find the right technical subordinates in which to place your confidence. You must be able to communicate with them. You need to understand things to the point where you can ask probing questions. You will regularly need to probe how projects are going and whether or not the technical people are sufficiently in command of the detail.

Remember also that technology people are somewhat unique in their personal makeup. They tend to “stew in their own juice,” and not communicate their problems. They tend to have the occasional idiosyncrasy...

As a whole, they also will respond very well to effective leadership. The onus is on you to help them communicate, to understand them, to maximize their

strengths and minimize their weaknesses through organization.

While your duties overseeing an IT organization will probably require you to expand your skills in some of the areas discussed above, it is my view that business and leadership skills are far more important than technical skills. I would recommend spending your time on the business-related strengths that you already have and shoring up any needed skills with capable subordinates.

Need further information?

Call us if you have questions or would like more information. This case is written as a teaching tool and is not intended to fully describe exact details or dialog.

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