

The Business End of IT Project Failure

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This new survey by STRATMOR confirms what many in the mortgage business already knew—IT project failure in the mortgage business is widespread. And it comes down to people issues—not technology—more often than not.

Even the most technophobic executives know they compete in a world where “no information technology” means “no business.” Yet hugely expensive information technology (IT) projects that fail to come in on-time and on-budget, and fail to deliver expected value are commonplace in the IT world overall and among mortgage banking firms as well. The question is, what can be done about it? ■ The STRATMOR Group looks at this problem with the intention of isolating a signal amid a wall of noise on this topic that will connect with senior business executives. This article looks at the frequency and root causes of IT project failure as it occurs in the world at large. Then we’ll compare those findings with a recent STRATMOR survey of IT project performance in mortgage origination firms. Lastly, we’ll look at how business vision on the part of executives and team leadership are at the heart of overcoming IT project failure. ■ If you are ready to set this article aside right now, thinking that your chief information officer (CIO) will shoulder this burden for you, go ahead—but don’t sleep too soundly.

The human implications of technology-driven change are far more important success factors than the technology considerations that are within the CIO's control.

Like many of our peers, we have for a long time observed that loan origination system (LOS) implementation projects are, in general, risky, and at best, a mixed bag—at least as likely to disappoint or fail as they are to succeed.

In the close-knit industry that is mortgage banking, we know that while there are firms that have enjoyed successful LOS implementations, there are many more that have not. Stories and rumors abound about the more spectacular failures. For obvious reasons, the details are rarely divulged publicly and are, therefore, difficult to validate or quantify.

How rampant is IT project failure in the world at large?

Before attempting to survey mortgage bankers' perceptions, STRATMOR identified many well-known independent research firms that have studied IT project failure in a broad range of industry segments. By the early 1990s, The Standish Group International Inc., Boston; KPMG, Toronto; Gartner Inc., Stamford, Connecticut; and the Aberdeen Group, Boston, all had already pronounced IT project failure a serious problem.

Among the studies these firms produced, *The CHAOS Report*, originally published by The Standish Group in 1994,

has become widely regarded as the landmark survey and is cited by virtually everyone who writes about this perplexing topic. The Standish Group originally sampled 365 respondents, covering more than 8,300 software implementations. These projects were undertaken in large, medium and small-sized companies across major industry segments that included banking; securities; manufacturing; retail; wholesale; health care; insurance; and local, state and federal organizations.

According to The Standish Group, only 31 percent of projects delivered 100 percent of their expected value, were on-time and on-budget. These projects alone were defined as having "succeeded." Abandoned or cancelled projects were labeled as "failed." Sixteen percent were abandoned or cancelled before completion. The remaining 51 percent of projects were defined in *The CHAOS Report* as "challenged."

In a similar study of 176 projects conducted in 1997, KPMG declared IT project failure to be rampant. Among the projects it analyzed, 61 percent failed to meet business-sponsor expectations, 75 percent missed scheduled completion dates by 30 percent or more and 51 percent substantially exceeded their budgets.

In 2000, Gartner reported survey findings based on 1,375 respondent interviews that showed roughly 40 percent of all IT projects failed to meet business requirements. The average cancelled project was originally scheduled to last 27 weeks and was

The Non-Technical Executive's Guide to IT Health

In virtually all of the diagnostic and prescriptive literature, "executive involvement and support" is listed as either a critical success factor or one of the prime suspects driving failure. STRATMOR Group LLC's view is that while this is certainly true, it also has become an empty cliché and an automatic scapegoat for information technology (IT) professionals to blame when things go wrong.

Executive involvement and support does not simply mean attending project-planning meetings, signing off on thousand-item requirement checklists and endlessly reviewing progress reports. Nor does it mean trying to become technology-savvy or more chief information officer (CIO)-like. It does mean applying your native intelligence and leadership—in other words, being the chief executive officer (CEO).

What follows is a set of simple and informal diagnostic tools to help you determine if your IT organization is in tune with your executive vision. There are no right answers here, but ask yourself these questions, listen to your gut and trust your judgment.

Fire-Fighting: If your staff is preoccupied with fixing things that break instead of preventing things from breaking in the first place, something is wrong. Make sure ample opportunity is available to implement "phase II" and to go back and replace expedient fixes with robust solutions. Without preserving some excess IT support capacity, you will not be able to respond when truly urgent changes in direction arise or when opportunity knocks.

The Donut or the Hole: When your IT team members talk about projects and priorities, are they more likely to suggest a way to improve company productivity by streamlining a function or eliminating a system, or will they be too busy talking about how many new servers they need to buy? If your IT people are always

busy talking bits and bytes, they aren't thinking about making the business more successful.

Silver Bullets: There is no silver bullet. And there will never be one—not for IT, not for the business. Change is hard work, not magic. You can always improve, and you want people to be trying new ideas. But if people are proposing silver bullets and "chasing shiny objects," they are missing the boat.

Plain English: To a business person, IT can seem to be an impenetrable, jargon-laden discipline. The converse is also true. When they get together, how well do your IT and business people find ways to explain issues in each other's language? Can they put it in plain English when they need to? How well do they listen to each other? If they cannot or will not, then the chances are pretty good that something is wrong.

Honesty: When was the last time a project team suggested to you that its project was unnecessary, out of control or beyond its capabilities? IT projects are multi-dimensional bets, and many things can go wrong midstream. Yes, worthwhile projects should—and can—be salvaged, but if your company is doing hundreds or thousands of projects a year, some are bound to have been ill conceived or become the victims of legitimate shifts in priority. The sooner they are recognized and honestly dealt with, the sooner your people can move on to truly important work.

Scope and Priority Referee: Are you and your executive team spending valuable time every week or each month grinding through fine-grained priority lists? Occasionally clarifying your strategy and making discrete, specific decisions is OK, but if people are struggling so badly with understanding your mission, strategy and goals that they routinely submit you to this torture, it means that they don't understand your plan.

cancelled in the 14th week. Gartner estimated that these companies each wasted at least \$1 million a year on IT work that did not lead to successful business outcomes. In a contemporary survey, the Aberdeen Group found 90 percent of projects came in late, of which 30 percent were simply cancelled before delivery.

In addition to the four research firms mentioned here, we also looked at three lesser-known organizations that published similar findings. The Bull Survey (1998), conducted by independent U.K. research company Spikes Cavell & Co. for the now-defunct French computer manufacturer Compagnie des Machines Bull, showed that 37 percent of projects failed to meet requirements, 75 percent missed their deadline and 55 percent exceeded budget.

The Conference Board Survey (2001), conducted by The Conference Board, New York, showed that 40 percent of projects failed to achieve their business case and 25 percent were over budget. And the Robbins-Gioia Survey (2001), conducted by Robbins-Gioia LLC, Alexandria, Virginia, reported 51 percent of respondents viewed their enterprise resource planning (ERP) implementations as unsuccessful.

Internal differences among these studies in selection criteria, sample size, definitions of success and failure, and classification make precise reconciliation of their findings impractical. Nevertheless, when they are looked at *in toto*, these studies tend to speak as one and corroborate one another. Their uniform finding is this: IT project failure is a big problem in business. When reduced to a single sound bite, their findings are consistent: More than half of IT projects fail to deliver the full complement of promised features, are completed late or overshoot their budgets.

Are these findings credible?

As you might expect, the implications of such miserable performance metrics have riled and embarrassed more than a few IT practitioners who simply view them as unreasonably pessimistic. *The CHAOS Report*, for instance, has been the target of challenges based on the reliability of its data and its interpretation of survey findings.

Some critics complain that project success is defined too narrowly—that a project can be both late and over budget yet still deliver significant value. Others think the report's findings are presented in a way that leads readers to lump the "challenged" and "failed" categories together, giving a false impression that more than 80 percent of projects failed. Other critics suggest there is simply too much subjectivity inherent in sampling perceptions of value-delivery.

While these are not unreasonable criticisms, they are also not very compelling.

In support of *The CHAOS Report's* credibility, it has earned a wide following among a large base of participants. The study has been conducted biennially since its inception, and the findings have varied little over that period (see Figures 1 and 2).

In a 2006 interview with InfoQ.com, Jim Johnson, founder and chairman of The Standish Group, responded to some of the criticism of *The CHAOS Report* by saying, "Most of the time I hear, 'The numbers are too optimistic.' . . . People know that the more common scenario in our [IT] industry is still over budget, over time and with fewer features than planned. Most of the comments I get on that are, 'I don't have *any* that come in on-time.'" There also

appears to be a high degree of acceptance by clients of *CHAOS Report* data over time.

Johnson added, "Our demographics have been presented in hundreds of cities around the world. It's on the Web. It doesn't take a genius to know our methodology; it's always been public."

How does mortgage banking IT project performance compare?

In February 2008, STRATMOR surveyed a representative sample of executives from midsized and large retail and wholesale mortgage origination firms. Invitations to take our short, confidential survey were sent to chief executive officers (CEOs) or division heads who classified themselves as executives dependent upon technology, but who are neither by training nor experience IT experts.

Recipients were asked to respond if they had been involved as a consumer, a sponsor or stakeholder in an LOS implementation started within the last five years. Given that some form of LOS technology is common to mortgage bankers of virtually all stripes, LOS implementation seemed like a highly suitable proxy to use in sampling mortgage banking IT project performance in order to shed light on the frequency and severity of IT project failure within our industry.

We asked three simple questions structured to enable comparison of our findings with those of the *de facto* standard Standish Group *CHAOS Report*:

- 1) Was the project completed within the approved budget?
- 2) Was the project completed on-time per the original schedule?
- 3) Did the project deliver the expected value?

As a follow-up to negative responses, we asked for the approximate percentage over budget or the number of months past the original due date, if known. The possible responses to question No. 3 were as follows: strongly agree, somewhat agree, don't know, somewhat disagree, strongly disagree, project was abandoned or cancelled. We made no attempt to query for respondent opinions of possible root causes of failure, but did allow for additional comments.

Not surprisingly, our results, shown in Figures 3 and 4, are similar to—albeit somewhat worse than—those experienced by non-mortgage industry segments and reported in the studies cited earlier. The results of our survey of mortgage IT projects showed the following:

- Only 11 percent of projects were perceived as delivered on-time, on-budget and with full expected value (i.e., "succeeded").

- Seventy-eight percent of projects were perceived as delivered late, over budget or with less than full expected value (i.e., "challenged"). Of these projects, 43 percent were over budget by an average of 23 percent, 100 percent were delivered late by an average of 8 months and 71 percent delivered less than full expected value.

- Eleven percent of the projects were cancelled or abandoned (i.e., "failed").

Interestingly, no respondent who reported that his or her LOS project was delivered on-time and on-budget "strongly agreed" that the project also delivered the expected value. It

seemed reasonable to us to grant benefit of the doubt in regard to this highly subjective question about delivering expected value. Thus, we scored responses of “somewhat agree” to be equivalent to “strongly agree.” Had we not made this adjustment, the survey would have resulted in findings of 0 percent succeeded, 89 percent challenged and 11 percent failed. That view seemed, to us, excessively harsh in its pessimism.

Taking into account our small adjustment, our survey found just 11 percent of LOS implementations were delivered on-time, on-budget and with all of the expected value.

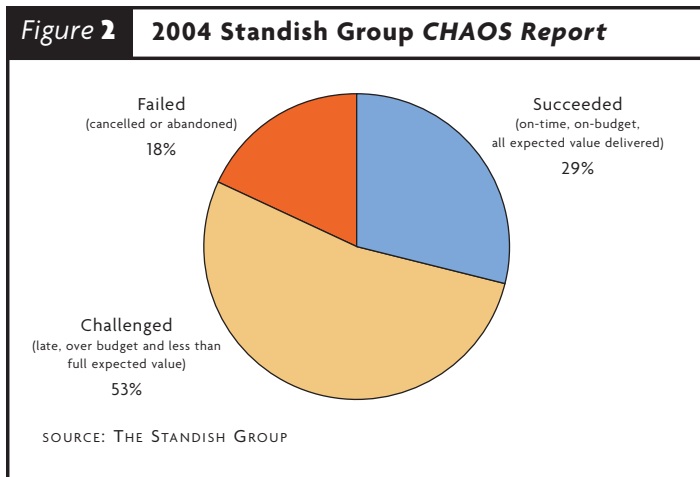
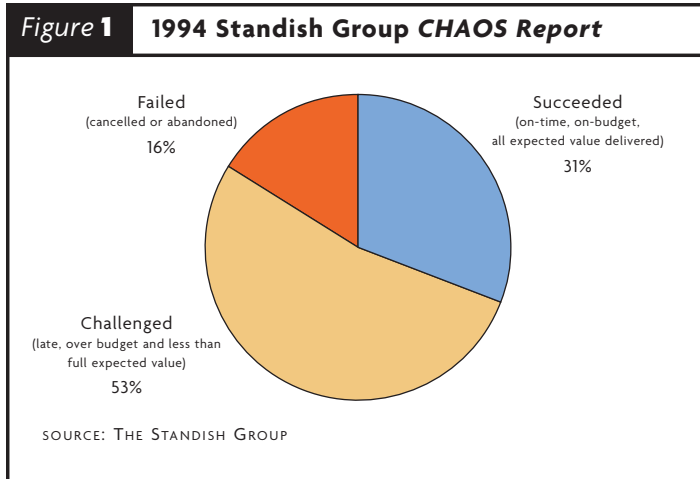
Of the remaining 89 percent that disappointed in at least one way, all were delivered between three and 15 months late. More than 70 percent delivered less than the expected value. Data about cost overruns were either withheld by, or unknown to, most respondents.

Given the investment that IT projects require, this picture is dark enough to warrant serious executive attention.

We believe our survey validates the notion that mortgage banking IT project performance is more similar to than different from other industries. Therefore it also seems reasonable to expect that the root causes of, and solutions to, our industry’s problems will be similar as well.

Root causes of project failure in IT overall

Many of the independent studies referenced earlier attempt to identify root causes and factors that may help explain IT projects’ routinely poor performance. These sources, taken

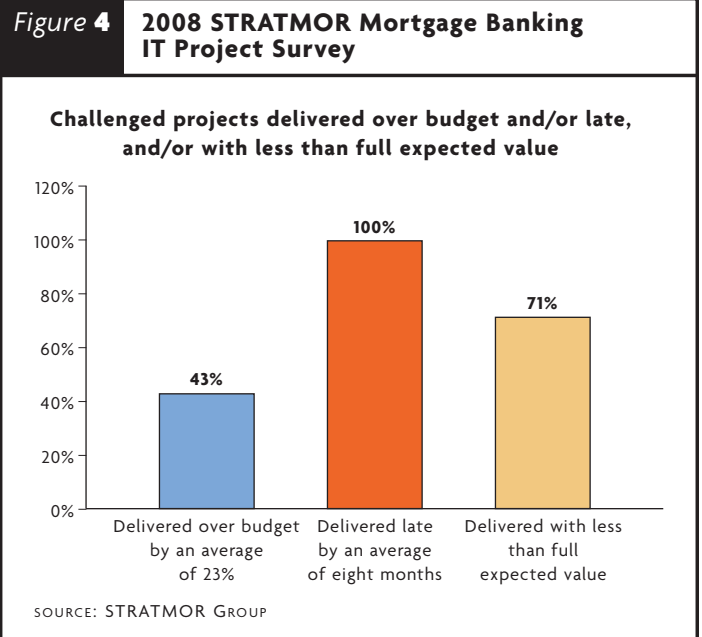
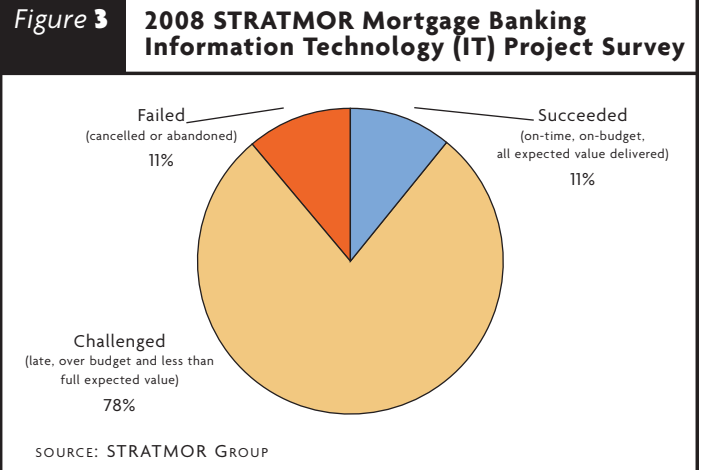


together with a host of other published analyses of the root causes that make IT projects go off track, appear often in the technology and mainstream media.

From STRATMOR’s perspective, the following represents a reasonable synthesis of recurring themes.

- Incomplete or changing requirements and specifications;
- Lack of user involvement;
- Lack of knowledgeable resources;
- Use of inappropriate tools and methods;
- Unrealistic expectations;
- Lack of executive support;
- Lack of planning;
- Poor quality control;
- Poor project management;
- Poor communication among the parties; and
- Poor processes for identifying and managing risks associated with the project.

There is no single, dominant cause. Nor is there even a consensus regarding the top causes—unless you stand back and notice that almost all of these issues are people issues, and that most of these people issues also have little or nothing to do with technology *per se*. Ironically, weakness in the



underlying technology is almost never mentioned.

These are classic management problems that senior business executives are well equipped to solve and cannot afford to ignore.

If you are a CEO and you are pleased with your company's ability to get important things done, even when those things involve technology projects, then we salute you. It says to us that you must be attending to the important people issues that are being neglected by your more challenged peers.

If you are not satisfied with your company's ability to get things done, what can you do about it?

Key ingredients for boosting project success

From our perspective, the following are the key ingredients for successful IT performance. They do not guarantee success, but we have never seen an IT organization perform well without them.

■ First, it is necessary to have a clear, complete executive vision of your mission, strategy and goals that is communicated and understood by all employees. Without this vision, there can only be accidental alignment among divisions, departments and individual people who must collaborate under pressure. With a clear sense of direction, people will intuitively align to make the right choices most of the time, leaving you to manage exceptions rather than having to steer every decision along the way.

For instance, we witnessed a very smart team of executives neglect to solidify the upfront marketing strategy, product design, corporate risk tolerances and market opportunity analysis when launching a major construction lending initiative. In a case of the-cart-before-the-horse, the IT team and the executives became paralyzed at every major decision point. No one was able to nail down the complete requirements, and a six-month project turned into a two-year nightmare.

■ Second, accountability for performance at all levels, starting with executive responsibility for providing leadership, is critical. The inevitable priority conflicts that arise in large complex projects do not resolve themselves—it takes leadership to help people cope with change and guide them over the chasms of misunderstandings.

One of the best concrete examples we've seen of senior line executive leadership in a successful project can be summed up in four words: "walk the talk weekly." The executive project sponsor met with the team every Friday to identify and solve any problem that stood in the project's critical path—including, and especially, conflicts in priorities and departmental interests outside the control of the IT team. The agenda was simple. Each team member, including the executive sponsor, reported to the group whether they had delivered on their promises from the week before—and if they hadn't delivered, they explained why not.

The project's timeline was very aggressive, the number of interdependencies was massive and the organization change

IT in Top-Down Cultures

We asked Dave Matthews, chief information officer (CIO) of the Federal Home Loan Bank of Chicago, to share his candid thoughts with us as a CIO who must deliver business value within the context of a traditional, top-down leadership organization.

Q: How important is it for information technology (IT) to be working from a clear executive vision?

A: The chief operational officers of the company need to provide a clear and complete picture of the business model and strategy—right down to the priorities and detailed requirements of the intended product mix and distribution channel requirements. To proceed without that clarity is to subject the company to undue risk of implementation failure. As a CIO, you can't build a system or install a packaged solution without an IT strategy that aligns with the business strategy. Without a clear business strategy, about all you can do is reactively maintain the systems you've got.

My experience is that in too many cases, especially in large companies, management misses the opportunity to refocus business strategy and prune operational deadwood that clutters the landscape—rarely used high-maintenance/low-profit products and obsolete processes. Instead, new systems are too often seen at the executive level as a panacea whose embedded new features, functions and process flows will somehow transform operations.

Q: Can you expand a bit on the topic of change?

A: In the trenches, a new system is seen as change—and everyone knows how much humans don't like change. So there is pressure to make the new system behave like the old familiar one that we loved to hate. What happened to the opportunity to add transformational value or to achieve at least a Pareto 80/20 ratio on clean-

ing up our inefficiencies? They got lost in the rush to implement the shiny new features that dazzled in the demo. In the meantime, core functions of the new system are modified to match the old ones, the implementation schedule gets stretched, the budget runs over and life goes on much as before. The dust settles and everyone looks around a year or two later and says, "Well, we didn't really get all the value we had hoped for out of the new system."

Q: How important is it for executives to resolve organizational conflicts?

A: One of the most painful, yet insightful, experiences of my career was to witness the birth and death of a large transformational project before it ever got off the ground. As in many large financial service companies, this former employer was organized in business-unit silos. The goal of the project was to create interdivisional collaboration at the consumer customer-service level—in other words, exploit the company's brand power to cross-sell and service all of its financial products at the CSR [customer service representative] level, regardless of organizational unit. Suffice it to say that the project aligned perfectly with overarching strategy and goals. After months of planning and millions of dollars of technology consulting, architecture and infrastructure expense, all of the interdivisional IT resources were aligned and ready, but the confidential compensation plans of the key interdivisional sponsors did not align at all. The project stopped dead in its tracks in the starting gate and never did pass "go." Only one or two of the top C-level officers could have known or resolved that conflict. From an IT project standpoint, it's better that it got killed upfront than two years and millions of dollars later.

Bottom-Up at Quicken

Todd Lundsford, formerly chief information officer and now chief marketing officer at Livonia, Michigan-based Quicken Loans Inc., takes a radically different view of how information technology (IT) should deliver value to the business—a view that starts and ends with Quicken’s vision, mission and culture.

Says Lundsford, “At Quicken Loans, I think we diverge from the mainstream in our approach to IT projects in three fundamental ways that are quite different from the ways that most companies address IT:

■ First, we are not good at ‘big-bang’ projects that reach for ‘transformation’—so we don’t do them often. Instead, we focus on creating more efficient production capacity in tiny increments on a daily basis—and we have gotten very good at that. Our IT projects rarely exceed three months in duration, and we will only do four or five of those in the course of a year. But we will easily make 10,000 or more changes to our processes and systems in that same 12-month period. Those changes will ripple through literally hundreds of integrated system components, all of which we will develop and maintain.

■ Second, the majority of our projects are conceived from the bottom up. The company’s mission—which, in our culture, means the ‘what’ that has to get done—is set from the top. But we do not look to senior executives, department heads or even production team leaders to crystallize their vision for how to get them done. In fact, we deliberately exclude them from the initial diagnostic and solution-design process. Our experience is that people who actually perform or manage a given operation are not in the best position to envision better ways to automate it. Our IT team analysts are skilled as roving observers who are empowered to create solutions that automate and add capacity to individual jobs, teams and even departments.

■ Third, everyone’s vested interest and job is to get rid of drag in our operations and improve customer experience one inch at a time. This is a reflection of one of Quicken’s most important ‘isms,’ coined by our chairman, Dan Gilbert: ‘The inches we need are everywhere around us.’ It is the job of everyone, in IT as well as in the rest of the company, to relentlessly fine-tune our ‘capacity engine’ to squeeze out more horsepower. Our culture has all the intensity of a winning professional sports team.

■ The types of individuals that succeed in our organization are those that look to grow our company—that pull their heads up from their individual roles and think of ways to help everyone (and therefore the company) to succeed. This is exemplified by another of Quicken Loans’ isims: ‘Innovation is rewarded; execution is worshipped.’”

impact was huge. No one wanted to let down, or be let down by, a teammate. More important, the IT team members became deeply interested in knowing whether the underlying business case that they were working so hard to support made sense, and they pushed back hard when it didn’t. The meetings could be contentious, but the executive sponsor was there every week to look everyone in the eye and hold him or her accountable, as well as to be challenged and held accountable himself by any individual on the team, no matter how junior in rank. The project was delivered successfully.

■ Third, talented IT people who understand the business and who are passionate about improving the business are indispensable. Without the requisite talent to carry out the intellectually challenging tasks inherent to technology implementation, even the best team of aligned, business-focused resources pursuing a clearly understood mission will sputter or fail.

Numerous studies show that the best IT people are at least 10 times as productive as average performers. These numbers are not dissimilar to the differences that CEOs see between their highest-performing sales rainmakers and the rest of the pack. Just as you need to focus on making sure that the very best salespeople are hired and retained, you need to be certain that you have the very best IT talent. Just like exceptional salespeople, highly talented IT people can have a disproportionate impact on the bottom line—making IT talent a variable that you cannot afford to overlook.

What to make of all this

Early on in this article, we advised that if you think you can hand off all responsibility to your CIO and sleep soundly—think again. All of the key success factors sit squarely in the executive domain and within a CEO’s span of control.

CIOs do not set the bar for personal performance or accountability in your corporate culture. Nor do CIOs typically have the authority to resolve conflicts and align all of the competing interests in large-scale IT initiatives requiring interdepartmental or interdivisional collaboration. Nor do CIOs typically control setting the company’s mission, goals and priorities, or the manner in which they are communicated to the whole organization.

Indeed, it is STRATMOR’s view that when senior executives from the business side of the aisle fail to communicate a clear vision of the company’s mission, strategy, goals and values to all employees, poor IT project execution is all but guaranteed—regardless of how talented the CIO and IT staff may be.

The good news is it doesn’t take a lick of technology savvy to provide executive leadership that will be felt in the belly of the company’s IT organization. It does take business savvy and the ability to communicate to the entire work force—a task that any competent executive is presumably well equipped to handle. **MB**

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