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Measuring IT Value

A Four-Step Methodology that Ties IT Strategy to Business Value

– Tim Miner

"An outwardly focused IT group concentrates on the effectiveness of information management, not just the efficiency of the underlying technology infrastructure."

In today's highly automated business world, the strategies and directions of the IT department increasingly form the basis for the overall corporate strategy. Once regarded as merely a service department, decisions made about the IT infrastructure now influence a company's competitive position, and often dictate its ability to exploit market opportunities. For example, manufacturing firms depend on their supply chain infrastructure to respond quickly to shifting production demands, while retailers look to the intelligence built into their inventory management systems to withstand cyclical downturns.

Thus it's no surprise that executive managers are placing a greater emphasis on measuring IT value. Time and time again, independent surveys reveal that aligning IT strategy with corporate objectives –and discovering methods for measuring IT value – are two of the top issues on executive's minds.[1]

Unfortunately, cost-cutting measures driven by the recent economic recession have caused many IT organizations to focus inwardly, and to emphasize their own efficiency rather than the ramifications of their actions on the organization as a whole. This emphasis distracts IT from the true role it should be playing within the enterprise. An outwardly focused IT group concentrates on the effectiveness of information management, not just the efficiency of the underlying technology infrastructure.

Internal studies conducted by Infosys have shown that most successful CIOs routinely measure IT effectiveness. Armed with this information, they can more effectively participate in corporate transformation exercises, rather than play the role of powerless service providers.

ViewPoint

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Forward-looking IT managers have clear targets to aim for, and they focus their resources on high-level strategic objectives rather than only on maintenance tasks. Executive meetings are more productive, since IT leaders can present a clear set of metrics to demonstrate that their department is on track and is optimizing the use of its budget.

The key ingredient to the success of these CIOs is their ability to associate business value with IT efforts. They understand what should be measured to quantitatively reveal IT value, based on the guiding principle that you cannot manage what you cannot measure. Routine gauges such as “IT spend as a percent of revenue” do not paint a complete picture. Senior corporate managers already have a flood of operational metrics. What they are more interested in hearing is how IT activities can affect business strategy.

Overcoming Objections

Many IT managers believe that the process of measuring IT value is too complicated to bother with. Since most of these individuals report to board members who have little understanding of technology – and because they are under constant pressure to keep their information systems online and up to date – such initiatives are commonly relegated to the bottom of the priority stack. None-the less, IT managers must justify their budgets, and are often asked how their particular department compares with other IT departments in their industry. Failure to set realistic expectations – and to measure performance against those expectations – Is a major contributor to the brief tenure of CIOs, which currently averages 18 to 24 months. [2]

Associating IT effort with business value is possible, but it requires a formal process, and it must bet racked and followed like any other IT initiative. IT leaders must allocate resources to the task and give it high-level attention. External consultants can help guide these initiatives, but they cannot own the process. The measurement process should be at the core of everything that the IT department creates and maintains; thus internal competency is needed to create and manage it.

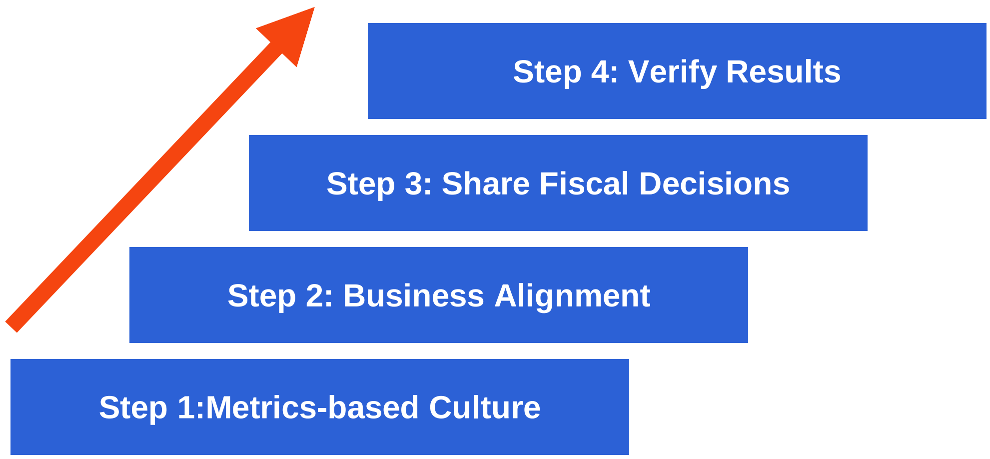
In the cases we have studied or been associated with, the two keys to success are enthusiastic leadership and speedy delivery. IT leaders need to create this enthusiasm within their own organizations, since it will usually involve as witch to a new management framework, such as the Balanced Scorecard. But enthusiasm is like milk: it spoils quickly when left out of the refrigerator. That’s why speed of delivery plays an important role as well.

> “Many IT managers believe that the process of measuring IT value is too complicated to bother with.”

The goal of this document is to identify, in practical terms, the best way to determine the business value of IT efforts. To that end, we have inter-viewed numerous IT managers at Fortune 500companies with headquarters in North America and Europe. Because we agreed not to name names or reveal corporate identities, these managers were able to speak freely, divulging information about those strategies that work as well as those that do not.

Many executives admitted frustration with articles that describe familiar pain points but offer little or no practical advice about how to induce change. Thus, rather than simply presenting a theory of what should work, we have summarized proven best practices in a series of four steps, as shown in the figure on the next page.

Key Action Items conclude each section. Infosys’ Balanced Scorecard Practice, which is part of the Corporate Planning Unit, provides this information in good faith to enhance its relationship with clients and potential clients. For more information on any of the steps summarized in this document, contact Infosys directly.



Four Step Methodology

Step 1: Create a Business Metrics-based Culture in IT

IT groups with a metrics-based culture constantly think in terms of how their efforts will be measured by the corporation. All initiatives are reflected against a clear set of objectives, with an eye towards determining whether these initiatives will draw them closer to achieving organization-wide goals. Staff meetings should not focus on anecdotal measurements, but rather strive to identify and present a clear set of metrics. This enables the staff to stay abreast of what has transpired, which goals are being met, and what needs to be changed.

What metrics/methodology do you use to measure IT value?

• ROI - 87%
• IT Balanced Scorecard - 30%
• TCO - 59%
• EVA - 19%

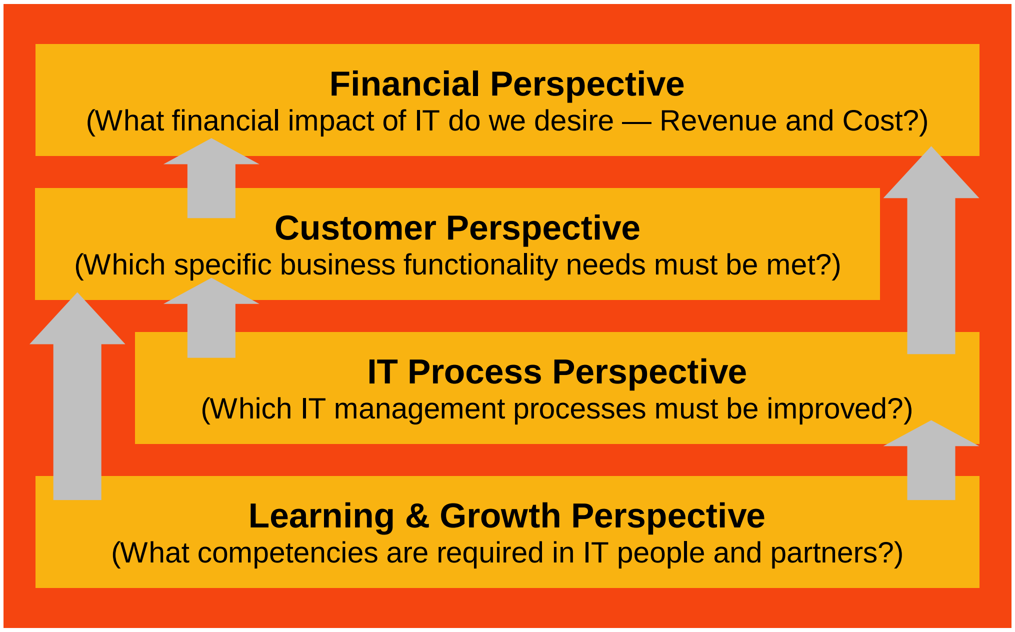
“Best Practices of Resourceful CIOs” (CIO Magazine - August 2003)

Business managers often complain that their IT departments do not measure themselves using business metrics. “Why,” they ask, ”should IT have its own set of metrics, when the business is run by another?”

“I feel like I’m talking to people from Mars,” said an executive at a large healthcare provider. “I look at pricing models and their effect on revenue but I do not see IT people judging their system downtime by the effect it has on revenue.”

There are two major reasons for this dilemma. First, many of today’s IT departments grew up in the 1990s,when the prevailing business dynamics forced them to become inwardly focused. The driving motivation during that decade was on automation for its own sake rather than on the tangible business value such automation can create. Secondly, because information systems often create their own operational data, IT managers attempting to measure their own success tend to gravitate towards system statistics that can be easily measured, such as CPU utilization or system uptime. These physical attributes of information systems are easier to gauge than the ramifications they entail, such as the effects of system down-time on product quality or revenue.

An increasing number of organizations are adopting the Balanced Scorecard framework customized to the needs of the IT department. This is an effective way to create a metrics-based culture, as managers create a complete set of strategic objectives and then identify measures against these objectives. During this process, a pervasive awareness is created within the management team that ultimately filters down through the entire organization. By their very nature, these Balanced Scorecards encourage IT stakeholders to consider the value created by their efforts, rather than simply the cost or efficiency of the underlying technology.



Within a major transportation company, for example, ideas for new initiatives are now considered within the context of a newly developed Balanced Scorecard. How will this new idea affect our current metrics set? How does the project fit in with the objectives we have set for our organization? These are the questions that IT professionals at the firm routinely ask.

Does a metrics-based culture limit innovative thinking? Not according to our study. As the IT organization at a large healthcare provider has demonstrated, metrics thinking promotes innovative thinking – and more highly targeted brainstorming.

“In the past, people hesitated to suggest new ideas because they invariably meant more work for them,” explained one IT professional. “In other cases, the ideas were forgotten by the next staff meeting. Today, we collectively decide whether we should pursue an idea based on how well it fits with the goals and objectives defined in our IT Balanced Scorecard. If the group does not consider it to be an immediate fit, it gets put into the parking lot for future consideration.”

Metrics-based thinking, as promoted by the Balanced Scorecard, simplifies performance management and results in more productive staff meetings. Instead of using anecdotal data to measure the group’s performance, IT leaders develop a clear set of measurable guidelines to help them determine how well they are doing.

Key Action Items:

- Create and implement an IT Balanced Scorecard
- Make the IT Balanced Scorecard the primary communication vehicle in internal and external discussions of IT value

Step 2: Ensure Business Alignment

While most IT professionals know that IT strategy needs to be aligned with business strategy, few of them follow an action plan to ensure that alignment. IT leaders should state their strategy clearly and concisely. More importantly, they should make sure that their strategy is visibly aligned with the overall business objectives.

The excuse most often heard for not aligning IT strategy is a lack of strategic focus from the business community being served. “Our IT strategy can’t be created until the business figures out what it wants,” said the CIO of a large insurance company. Meanwhile, the CEO at a major shipping company told his HR and IT divisions that he did have an overarching corporate strategy – in his head.

These anecdotes are typical. Most of the people we interviewed admitted that the business strategy affecting IT is not very well defined. But once one side of the house firms up its strategy, the other will frequently follow - something we like to refer to as the “Jell-O phenomenon. ”If IT can communicate a clear and precise strategy, the driving business strategy will gel as well.

Those IT departments that can articulate a strategy with clearly identified objectives and metrics quickly discover a similar alignment process among their business partners. For example, when a major healthcare provider set out to educate its business community on the issues facing IT, the doors of communication were opened. Not only did senior managers walk away with a better understanding and appreciation of IT challenges, but IT managers gained greater insight into corporate financial decisions. “We wanted them to understand the costs that trail every new system implementation, such as maintenance,” reported one executive, during a session on the IT Balanced Scorecard hosted by Infosys.

Another important best-practice we have noted is the use of cross-functional steering committees, in which both business and IT takes responsibility for setting priorities and discussing IT expenditures. These meetings help align business and IT objectives by tackling controversial issues such as how best to allocate the budget.

Key Action Items:

- Use the IT Balanced Scorecard to achieve alignment between business and IT and to prioritize initiatives
- Create cross-functional steering committees

Step 3: Encourage Business Leaders to Share in IT’s Fiscal Decisions

All four steps outlined in this article are important, but this step is particularly crucial to the process of communicating IT value to the business. It is vitally important that the responsibility for IT expenditures is carried out across the board. Business leaders who do not share this responsibility tend to view their IT departments purely as service providers. As such, their cursory attention to IT issues is primarily concerned with constraining expenditures and eliminating costs, rather than trying to understand how technology can add value to the business.

One way to solve this dilemma is to install a separate finance organization that does not report directly to the CIO, but is still regarded as part of the IT organization. Reporting directly to the CFO, the charter of this IT-oriented branch of finance is to validate IT expenditures by either creating or approving a business case for each project, before those projects are budgeted. We interviewed a Fortune 100 electronics manufacturer that has used this strategy successfully for many years. “The key is to choose the right people for the job,” said the head of the IT finance team.

“You need people with a clear understanding of both IT and finance who can act as gatekeepers for IT projects. As projects progress from one phase to the next, these individuals carefully review the objectives and justify the expenditures.”

While these gatekeepers could easily be seen an inhibitors to progress (since they have the power to stop funding for projects that stray from their defined business objectives),in this case, the IT finance team is seen as one of the CIOs key facilitators, spending most of their time working with the CIO to budget projects and justify expenditures to the executive committee.

Another popular way to get business to shoulder IT’s fiscal decisions is to implement a chargeback system. This financial process ensures that business is charged for every IT effort “ordered” through the requirements process. This way, IT only has to man-age a small budget for strategic initiatives and can focus on deploying and maintaining the fundamental infrastructure for enterprise systems.

What areas of IT governance do the cross-functional IT steering committees in your organization cover?

- Architecture - 55%
- Infrastructure renewal - 47%
- New Projects/Business transformation - 38%

“Best Practices of Resourceful CIOs” (CIO Magazine - August 2003)

Keep in mind, however, that not all charge back systems fulfill their intended objective of curbing business’ appetite for technical solutions. Some companies revert to a standard cost allocation system if the chargeback method backfires. CIO Magazine relates the story of a CIO at a major U.S. Insurance provider, who discovered that their chargeback system had the opposite result of the one initially intended. Since business units were charged for allocated IT headcounts whether they used them or not, spending quickly spiraled out of control. [3]

Just as socialistic governments commonly experience waste with their far-reaching taxation policies, chargeback systems can have the unintended effect of making business units request for more resources than are necessary. To combat this tendency, charges must be clearly defined for those receiving the invoice, which usually means a substantial amount of red ink and overhead.

The best chargeback arrangements are simple and do not attempt to prioritize the projects with-in their purview. The prioritization process should still reside within the joint business-IT steering committees formed in Step 2,and the financial controlling system should support their decisions. Many failed chargeback projects were initiated out of frustration with a dysfunctional prioritization process. But this is the wrong reason for implementing a chargeback system in the first place.

One transportation giant went so far as to rename its financial reporting process “show-back” rather than chargeback. By carefully revealing how IT dollars are spent, they created a system that encourages business to jointly shoulder the fiscal responsibility for decisions made in IT.

Key Action Items:

- Establish an IT-associated finance team
- Implement an easy-to-understand and simple chargeback system

Step 4: Verify the Business Results of IT Projects

In a recent survey of more than 100 IT departments, many of which are in the Fortune 500,more than two thirds of the respondents said they frequently conduct post-implementation audits. [4]

Unfortunately, none of the parameters usually associated with business value were prominently considered, such as cost, revenue, employee productivity or competitive advantage. Instead, the most popular parameters were standard IT efficiency measures: on-budget, on-time, service levels, and internal customer satisfaction. These parameters are certainly important, since they help IT departments become more efficient. But they do not really measure the business value IT has had a hand in creating.

Management guru Peter Drucker consistently reiterates the theme that IT departments need to step back from their internal focus and strive to define their roles within the organization. Instead of focusing on “doing things right, ”they should concentrate on “doing the right things ”if they are to help create business value for their organizations.[5]

Sixty percent of the companies surveyed said they frequently or always conduct post implementation audits to verify the targeted business value.

The top three factors taken into consideration when measuring IT value:

1) Budget versus Actual
2) Internal Customer Satisfaction
3) On-time or On-budget Project Management

“Best Practices CIO Survey” (CIO Magazine - May 2003)

One Fortune 100 electronics manufacturer conducts a “post mortem ”assessment of every IT project. The assessment is handled by the finance group (which is assigned to the IT department) and is concerned with both tangible and in tangible returns. The tangible business value can be easily measured, since it is usually associated with costs or revenue enhancement. Since the finance department conducts the post implementation review, cost savings are reflected immediately within the business units’ budget. This was not always the case at the other organizations we interviewed. For example, the IT department of a major transportation company worked hard to reduce head count, but the associated business unit’s budget was rarely corrected to reflect these cost savings.

Thus the actual business value gained was perceived only in theory.

The intangible business value targeted by the electronics manufacturer was harder to measure.” Our practice is to lay out the intangibles, such as increased competitive advantage, in such a way that they can be verified,” said the executive in charge of the process.” We do not have much experience with projects that did not meet their intended business value targets, since most are revised to do so using change orders long before the project is completed.”

Executives at an international bank explained how they audit all projects using a separate finance team that is associated with IT management, although it does not report directly into IT.” By verifying the business value we attain with each project, we are able to keep the business-IT relationship strong,” they reported.” Thanks to these efforts at tracking and communicating, we have helped establish a strong track record for IT over the years.”

Key Action Items:

- Initiate every project with verifiable tangible and intangible benefits
- Establish regular post implementation audits of the business benefits that were actually achieved

Summary: Get Started Now

The role played by IT within large organizations is under constant transition. IT departments that cannot clearly associate themselves with the business value of their efforts will be continually relegated to a non-strategic, service-oriented role. Those departments that can demonstrate value, however, will take a deserved seat at the table of executives governing business transition. These business-minded IT professionals will play a critical role in helping their organizations fully exploit technology to improve the business.

About the Author:

Tim Miner, Senior Principal with Infosys Corporate Planning Unit, has 15 years of experience helping companies define and implement corporate strategies in such industries as Entertainment, Manufacturing, Retail and Electronics/High Tech. He has facilitated and overseen the creation of Balanced Scorecards for numerous Fortune1000 companies. Miner has also developed unique methodologies for positioning IT and communicating corporate strategy among industry-leading management teams.

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