

# Ten Strategies to Improve the Return on your Technology Investments

*A White Paper*

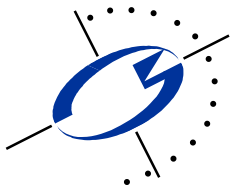
by

CGN & Associates, Inc.



# Ten Strategies to Improve the Return on Your Technology Investments

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The Information Technology Strategic Plan (ITSP) should be a company's single most important IT-related document. This paper describes the importance of the ITSP and provides ten *Instruments for Success* to leverage the power of the ITSP.

Managing technology in today's fast-paced environment, where business demands are in constant flux, is no mean feat. New and emerging technologies present opportunities to stay ahead of the competition. Information Technology (IT) trends and standards need to be tracked. Pressures to lower costs, trim budgets, and demonstrate ever-increasing returns are continual. Talented and skilled employees are scarce. The economics of moving from existing internal standards to new technology standards continues to be a challenge.

“ Judicial management of IT departments dictates that all actions undertaken must be directly tied to a business driver.”

Judicial management of IT departments dictates that all actions undertaken must be directly tied to a business driver. In other words, the needs of the business drive the initiatives of the IT department. The high costs of IT can not and should not be shunned by the organization; rather, they must be viewed as another necessary investment in the delivery of products and services, much as payroll and accounting are also necessary expenses.

How can we determine the impact of an IT department in support of strategic business objectives? This determination can not be made by the IT manager, because the impact must be measured by those most intimately familiar with the business processes. If the IT department deploys a solution to support a business need, then the business managers benefiting from the solution are most qualified to assess its impact. The savvy IT manager will partner with senior business managers to correlate the value of delivered solutions. This approach provides the credibility necessary to support a sound IT strategy.

A forward-thinking IT strategy that focuses on increased growth and/or revenues must be flexible enough to allow for technology changes while managing acceptable risks. It is crucial to periodically review IT strategies to accommodate changes in technology or business direction. If today's organizations are to remain competitive, they must learn to adopt technologies that best fit their desired objectives. Does the organization implement leading-edge technologies to provide a competitive edge and manage risks associated with lack of demonstrated maturity, support, or market direction? Or should the organization manage risks at a lower level by implementing mature technologies that are well supported, at the risk of losing a competitive advantage? These questions must be answered by the strategic business objectives of the organization.

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## Executive Summary

Most businesses recognize that technology is core to their future success while continuing to represent tremendous challenges. Today, technology enhances the ability of a business to reach out to distant customers; helps marketing and sales to identify, track, and better manage customer information; improves the quality of customer service; and improves operational effectiveness, internal tracking, and management. CEOs and CIOs of midsize companies are fully cognizant of the opportunities and challenges posed by Information Technology (IT).

Most companies persevere in their efforts to define the value of Information Technology. IT, however, is only one of many tools in the business tool kit. IT impacts the value of the firm through its impact on every project. These impacts are either revenue impacts or cost impacts, resulting in a net impact on the bottom line of every project.

When strategic direction leads to technologies outside the knowledge scope of the business, professional consultants can be leveraged to provide efficient and effective solutions to IT and business needs.

Over the years, CGN has worked closely with several organizations, assisting them to get better results from their IT investments. We recognize that some organizations are definitely more successful than others at managing their technology.

In this article, we have tried to briefly outline what we recognize as the Best Practices from the organizations that lead the pack. CGN methodologies and practices incorporate several of these techniques to help our clients get the best return from their IT investments.

## Instruments for Success

### 1 Ensure that IT Initiatives clearly align with Business Strategy.

- ũ Develop and maintain an Information Technology Strategic Plan (ITSP) that is traceable to the company's business strategy.
- ũ Rank all IT initiatives based on their criticality to the business and their value in meeting strategic business goals.
- ũ Develop the ITSP in conjunction with direct inputs from the functional Business Managers (Sales, Marketing, etc.) and Business Unit Managers. This ensures their buy-in and ongoing ownership and support.

The IT manager should document the strategic business direction from senior business managers and align the ITSP to reach those objectives. The alignment of Information Technology to the business strategy is a critical success factor that must not be overlooked. The general managers of an organization are uniquely qualified to define what has value to the organization and thus can provide the necessary perspective for the IT manager to better align the IT strategy with the business goals of the organization.

It is then the responsibility of the IT department to perform an internal assessment of its project intake capacity and apply that production capacity toward the implementation of strategic solutions. Generating consensus among the general managers in prioritizing IT initiatives in relation to strategic business goals is critical. This prioritization exercise will allow the IT and business managers to create a list of identifiable strategies ranking from high-impact/rapid deployment to lesser impact/slower deployment solutions.

Facilitate this process in close coordination with executive managers to ensure buy-in to the strategic plan.

### 2 Manage IT Budget with an eye for Business Impact.

- ũ Create a comprehensive IT financial plan – calculate the business Return On Investment

(ROI) for every IT Initiative.

- ũ Analyze the entire life cycle cost for IT initiatives – not just the up-front cost.
- ũ Use your business leaders to estimate both the revenue and cost inputs.
- ũ Include the risks of utilizing a new technology in the calculation.

To craft a comprehensive financial plan, the IT organization must embark in a quest for knowledge with key executive business managers and define initiatives intended to support them in achieving strategic investments. The IT solution should meet the business need and account for costs: direct, indirect, and consequential.

Some initiatives may carry peripheral effects or *unintended consequences* of the steps taken. These unintended consequences result in new problems being created. For example, a strategy to address the goal of a specific business unit may result in new processes that require additional operational support. If the target organization can not support the additional workload, and another strategy is not feasible – will you then outsource and budget accordingly? Is the IT department expected to absorb the costs? Or will the supported business unit fund the initiatives? If the life cycle costs of a given initiative are not clearly defined from inception, those costs can negate the ROI of the initiative over the long term.

Define the ROI of all initiatives, including strategies to reduce costs such as business process re-engineering. Business managers understand strategy and its expected impact; they can help IT managers assess value and define ROI. The same steps can be used to assess the value of initiatives intended to increase business. Effective IT departments will successfully link their operating costs to the fulfillment of target revenue generation.

Justification of IT initiatives should be traced through measurable business drivers and be reduced to:

- ũ Revenue Impact (such as increase in sales or market-share),
- ũ Cost Impact (reduction in operational cost or unit cost), or
- ũ Value Impact (that drives higher price tolerance within potential customers).

All of these will result in a net impact on the bottom

line against which the investment should be measured. All lifecycle costs for IT projects must be considered, including ongoing operating costs. Most firms fail to account for all lifecycle costs; thus they have incorrect ROI expectations for many projects.

### 3 Select the right technology and maintain a technology architecture for your business.

- ü Let the Information needs of the business drive the selection of the technology and priority.
- ü Worry about internal standards – but keep an eye on evolving industry trends and standards.
- ü Evaluate new technology-enabled opportunities continually. If there is uncertainty about the maturity of specific technology or its ability to support a specific business need, identify a technical resource to research the technology and feasibility up front (don't start the project based on assumptions and then try to make it work).
- ü Build a prototype to validate the viability of the concept before laying out a complete project plan.
- ü Include in the calculation the risks of not utilizing a new technology.

The creation of corporate-wide standards aimed at fulfilling an overall strategy is a key issue for all IT departments. IT departments must always watch for enabling technologies that “best fit” the business model and provide flexibility. Technology standards lay a foundation that facilitates expansion and efficient use of resources. The absence of standards usually results in implementation of tools and technologies that over time become a web of complexity, causing additional cost and confusion. Another issue to watch with standards lies in the direction of market trends. To retain a given technology in the face of waning market support is usually inadvisable, as it typically leads to higher costs with a loss of competitive advantage.

With an emerging technology, it is crucial to use risk management processes to determine its supportability, maturity, and the com-

petitive advantage that it may provide. Often, if a major market leader drives the emerging technology, it becomes a *de facto* standard. One should consider the vendor's market position in the evaluation process.

The adoption of emerging technologies must be undertaken with due care, and many times external resources are required to provide the necessary expertise. The expertise of these external resources can maximize R&D dollars by efficiently prototyping and validating different solution sets. The value of prototyping lies in knowledge gained and lessons learned that can be leveraged to craft realistic and achievable project plans.

### 4 Project Management is the key to successful IT Projects, not just the technology.

Project Management teams should be held accountable to:

- ü Bring in projects on schedule and within budget.
- ü Manage the dependencies within project tasks.
- ü Coordinate resources – both external and internal – to get the job done.
- ü Take the guesswork out of project management. While implementing the project, the PM makes minimal technology selection and is more focused on implementing prior decisions.
- ü Meet the original business goals/metrics established in the ITSP.

Project management is the cornerstone of change. Without a sound approach and experienced managers, the simplest projects can result in diminished returns or even failure.

All organizations should develop and follow a project management model in order to ensure checks and balances that track progress and ensure project target effectiveness. The model provides a common methodology for all project managers and standardizes the tools and processes necessary for project control and delivery.

It is also imperative to create and implement a sound

“IT departments must always watch for enabling technologies that ‘best fit’ the business model ...”

ITSP (created by teaming IT managers with business managers) to choose technology that effectively addresses the need for a project or an initiative. If the underlying business driver is well understood, technology implementation will naturally follow a path that supports the need. This method of project management requires close coordination with the customer and a large body of work in the planning and design stages. However, if properly executed, it results in effective technology use and satisfied customers.

Once the right technology or solution is chosen, knowledgeable technical implementation managers are crucial. The ideal project team should be composed of experienced project managers (who may not be technical experts) and technical implementation managers. The project manager and technical implementation manager, together, present a formidable team possessing the critical business and technical knowledge to ensure project success.

When the organization lacks sufficient resources or the knowledge base to implement a project, outside resources should be secured. It is then incumbent upon the project manager to manage outside resources, integrate them into the team, and coordinate their actions.

Project managers should also develop meaningful metrics relevant to project control and post-delivery performance. These metrics are essential to assess project performance and effect contingency plans when variances are discovered. This is a crucial step in ensuring that business goals are met.

**5 Make sure that your IT resources have the time, technical know-how, and the right incentive to support you with all the IT decisions that you need to make.**

- ũ Ensure that IT resources are being measured by their ability to meet business goals and financial goals or metrics established in the IT SP.
- ũ Get the expertise from outside when required.
- ũ Define areas for technology transfer.

*“The successful IT manager has to align the IT strategy with the stated strategic business objectives ...”*

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**Managing an IT department includes maintaining the balance between Strategic and Operational issues within the organization.**

- ũ Develop core expertise in managing IT Outsourcing Contracts.
- ũ Focus your IT initiative around your internal and external customers.

Make sure that you have the right management in place to drive your IT efforts. Ensure that the functional leaders within your business are regularly reviewing and supporting IT decision making.

Managing an IT department includes:

- ũ Defining future IT Strategy for the business,
- ũ Managing projects and implementing new IT systems, and
- ũ Maintaining IT operations.

An organization has to be successful on all three fronts to be effective. IT organizations are often successful on one or another front and struggle with balancing multiple contingencies.

An IT organization with a skewed management structure is effective in one or another front. Those that are strategic in their perspective tend to have new technology and applications driving the business at the expense of day-to-day operations. Others are run smoothly with no clear sense of future direction. Both extremes can be expensive for the business. Typically, it requires a mix of leadership expertise to support this balance.

The successful IT manager has to align the IT strategy with the stated strategic business objectives and provide the means to deliver solutions targeted at realizing those objectives. The value of the ITSP lies in the guidance it provides in defining work required to accomplish goals and their order of precedence. The ITSP, therefore, is the single most important document the IT Manager maintains.

The IT manager must also understand the project intake capacity of the IT domain to achieve stated

strategic goals. The production capacity of the department should drive the number and type of engagements. Understanding the production capacity of the IT department is also crucial to maintaining effective daily operations. There will be times when external agents provide the most cost-effective resource solutions. When the size and complexity of the projects exceed the production capacity of the department, it is wise to look for outside resources intimately familiar with the solution sets being implemented. Their knowledge will streamline processes; outside sources also provide the technology knowledge transfer required for internal growth.

## 7 Encourage your IT Managers to become experts in your business and fundamental management – while clearly remaining technologically aware.

- ũ It should be the IT manager's job to look at the technology options for your business – not to become an expert in every technology or personally implement each one.
- ũ Your IT team should be able to better communicate with your functional managers in terms that they can understand.

It is crucial for IT managers to understand emerging technologies and market trends. Seldom do the currently implemented technologies target 100 percent of the required solutions. The rate of advancing new technologies is constantly increasing, with each new technology filling gaps previously not addressed. It is impossible for any one person to be an expert in all technologies; however, it is crucial to at least identify which technologies may be relevant to the business needs.

The IT department should have clearly defined responsibilities for knowledge areas assigned to various managers. There should be sufficient overlap in the knowledge areas to provide a fundamental understanding of other technologies with lateral dependencies. Each manager must periodically review the ITSP and stay abreast of the marketplace to identify those solutions that “best fit” the needs.

If IT managers understand business strategy and

available technologies, effective communications are enabled between the technology and business managers. Clear and concise communication by all parties is crucial to the understanding of the initiatives and how the needs are targeted.

## 8 Communicate your ITSP within your organization. Drive ownership and accountability. Manage change.

- ũ Have the ITSP reviewed quarterly by all functional business managers. Incorporate changes based on changing business needs or new technology recommendations.
- ũ Have the functional business managers assume ownership for the ITSP, along with the IT department.
- ũ Initiate corporate infrastructure initiatives that will support multiple business units or functional units.

In several cases, the funds for the IT initiatives are budgeted under the various business units or functional units (such as Sales and Marketing) and allocated and approved by them to the IT department. Executed correctly, this drives ownership for initiatives and accountability within the IT department. Maintain a separate corporate budget for the IT department that will support IT R&D and departmental training.

## 9 Manage technical skills to maintain a productive work environment.

- ũ Execute a training and R&D budget for your IT department – schedule resource hours for continuing education and training for your IT Staff (estimated 2 hours/week; \$2500/year).

IT personnel should have an opportunity to develop awareness of what is possible, and to try new ideas to improve your business. Listen to their recommendations. But when necessary, get some expert help and train your own people with the outside experts.

When new systems are being introduced, take into account the substantial costs of training us-

“Review the ITSP for changes in business priorities quarterly. Develop a new ITSP from scratch every 30 months ...”

ers and the loss in productivity. When new platforms or completely new user environments are being introduced, there will be glitches and resistance from users. Things will get worse before they get better.

## 10 **Review your IT Strategy & update it periodically. Communicate changes.**

- ũ Review the ITSP for changes in business priorities quarterly.
- ũ Develop a new ITSP from scratch every 30 months.
- ũ Benchmark yourself against competition. Look at what your competition is doing with IT.
- ũ Measure the impact of IT on the business against the ITSP. Improve business focus within the organization.

The value that an IT initiative brings to the organization diminishes with time. Emerging technologies and the competitiveness of what others are doing will continually sap the company its edge. It is imperative that, as the business direction changes, so does the IT strategy, always in step with the business end.

The management of risk induced by either applying new technologies or remaining with current technologies can only be defined by the strategic business objectives of the organization.

If the past teaches us anything, it teaches this: what was important in the past has now been copied by competitors and no longer holds significant value. Additionally, some changes will introduce negative value (for example, Y2K compliance, which, if not engaged, may place the company in a competitive disadvantage).

Herein lies the need to implement a continuous improvement quality approach to the business of IT. As time evolves, so does the business, its direction, and its needs – *therefore the need to refine the ITSP is a continuing process.* 