

CHAPTER 1

Define the Goals

This book is based on a very simple idea: A company should only spend money on IT¹ that directly supports its business strategy and its operational effectiveness, and should not spend money on IT that doesn't. The management team can control IT budgets and investments and, at the same time improve, IT's bottom-line impact by consistently and persistently selecting the best IT investments, and eliminating underperforming existing IT activities. This book shows how to do that.²

Right Results: The "right results" we want are controlled IT costs and at the same time improved bottom-line impact.

Right Decisions: The "right decisions" lead to the management actions needed to produce the right results. These right decisions lead to:

- Creating better investments alternatives—or, in IT terms, creating better ideas for development projects.
- Choosing the right investments and projects from the alternatives.
- Eliminating nonperforming and poorly performing existing IT resources from current spending.
- Improving the performance of the remaining existing IT resources.
- Implementing and following through on the right investments and performance improvements.

Our Right Results goals of controlled IT costs and improved bottom-line impact work together. As new projects enable the business to improve its products,

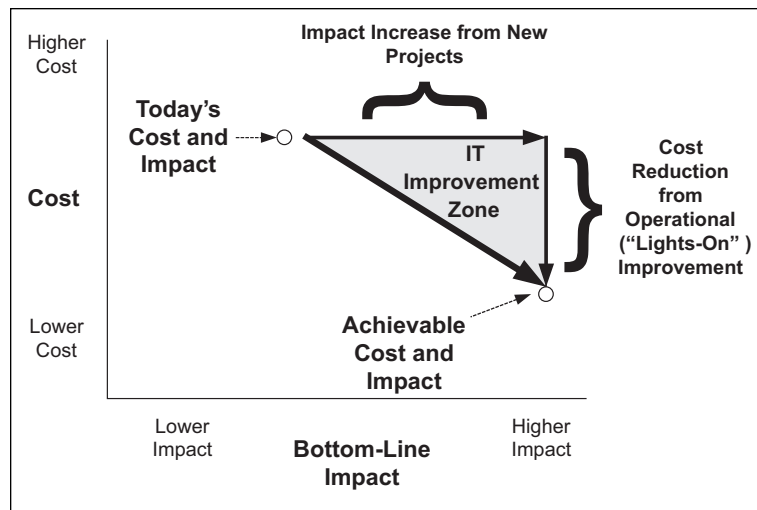
Control Spending and Maximize Impact on the Bottom Line	
1	Define the Goals
2	Ask the Right Questions
3	Connect to the Bottom Line
4	Understand Costs and Resources
5	Focus on the Right Things
6	Adopt Effective Process to Produce Action
7	Tackle the Practical Problems
8	Make the Right Decisions
9	Plan for the Right Results
10	Keep Score
11	Implement Right Decisions/Right Results
12	Chart the Path to Implementation
13	Define What's Next
14	Answer the "So What?" Questions

services, or quality, and at the same time reduce operating costs, higher impact on the company's bottom line will result. As management focuses on controlling ongoing operational costs, overall costs may decline. This combination allows the company to move from today's cost and bottom-line position to a future controlled-cost and improved bottom-line impact position.

To accomplish this, business executives and IT managers balance new IT investments with the ongoing assessment of the performance of committed IT resources. Money saved in one area can be applied to the other. From senior management's perspective, this all adds up to the "IT spend." From IT management's perspective, this all represents the resources that must be managed effectively. Working together, the goals of controlled IT costs and improved bottom-line impact can be realized.

This is the goal of this book; as illustrated in Exhibit 1.1. Companies can work toward goals in the IT Improvement Zone by examining and improving both new project impact and ongoing costs.

EXHIBIT 1.1 Our Goal Is the IT Improvement Zone



TODAY'S REALITY

Companies spend as little as 2 percent and much as 10 to 15 percent of revenue on IT, including the ongoing cost of keeping the existing IT operational activities going as well as and new investment in development and enhancement projects. As shorthand, we can call the first the "lights-on" budget³, and the second, the "projects" budget.

We are interested in the entire IT spend, the sum of lights-on and project budgets. Most of the spending is connected to ongoing operational costs, often 70 or 80 percent of the total. To be serious about controlling cost

and increasing IT's impact on the bottom line, we have to address the entire spend.

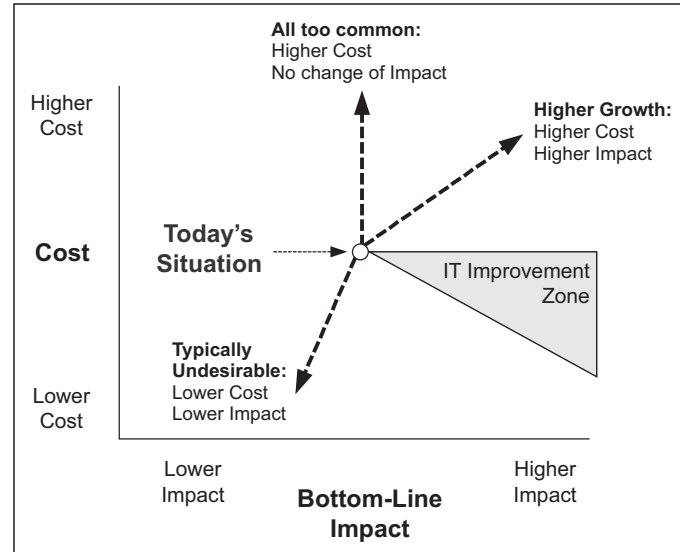
However, with IT as in many other parts of the business, simply reducing IT costs does not by itself improve the bottom line. But with the right management frameworks and management practices, companies can successfully control the growth of IT costs and at the same time improve the business bottom-line impact of those costs and investments.

Historically, company executives have spent a great deal of time evaluating and prioritizing new IT projects and investments. Considerable management energy is spent prioritizing and dealing with the politics of project selection. However, this effort applies to perhaps 20 or 30 percent of the overall IT spend. The other 70 or 80 percent, the lights-on budget, is larger but attracts almost no attention from management. In many ways, the lights-on budget is a black box with no visibility to management.

An "entitlement" mentality tends to apply to the lights-on budget, where each business manager expects that the information systems now in place will continue with current or improved levels of support, and the CIO tends to expect that the base budget for current applications support, including infrastructure, will continue at current or increased levels. This entitlement mentality also affects project prioritization (managers fight for "their" projects to be done by "their" project people) as well as the ongoing costs of supporting each manager's applications. It can be very difficult to reduce support for existing individual applications, making it difficult to control and possibly reduce the lights-on budget over time.

As a result, rather than pursuing the goals of both reduced cost *and* improved bottom-line impact, managers focus on one or the other. This leads to one of several unfortunate scenarios, as shown in Exhibit 1.2.

1. **Lower lights-on cost *and* reduced bottom-line impact**, where companies focus solely on cost reduction, without considering the specific impact the cost reduction has on IT's contribution to the bottom line. A typical outsourcing arrangement fits this scenario.
2. **Higher lights-on cost combined with *no* improvement in bottom-line impact**. This is the entitlement situation, where managers assume that lights-on budgets will regularly increase and new projects are chosen that do not produce enough bottom-line impact to overcome increased costs. Companies that rely on traditional budget methods and traditional business-case and prioritization methodologies often end up here.
3. **Higher lights-on cost *and* higher bottom-line impact**. This scenario is common where business conditions are improving or where the business is rapidly growing. Business growth obscures the fact that better management scrutiny of both projects and the lights-on budgets can make the result even better, and perhaps even move the scenario into the sweet spot of both lower costs and higher bottom-line impact. In times of rapid growth, higher cost may be unavoidable, but it does not have to be uncontrolled or unreasonable.

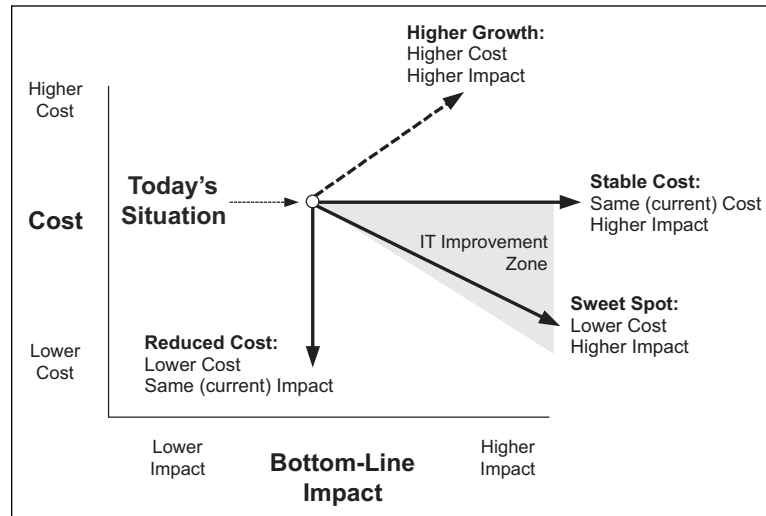
EXHIBIT 1.2 Current Patterns for Many Companies

THE ENTIRE IT SPEND: REDUCING COST AND IMPROVING BOTTOM-LINE IMPACT

We want to be very clear on this: Getting the Right Actions and Right Results means dealing with both IT's cost and IT's impact on the bottom line. Of course, if we reduce IT's cost, then some of that cost reduction will filter down to the bottom line. But that is not what we mean when we talk about IT's impact on the bottom line. Bottom-line impact, both short- and long-term, comes from the cost reductions, quality improvements, and so forth that IT enables in the rest of the company, and from making sure that *these* IT business impacts flow to the bottom line. Over time, we want management teams to be able to dramatically improve *both* cost and bottom-line impact.

To accomplish this, we propose three possible objectives, shown in Exhibit 1.3, that a company may pursue, depending on its current circumstances:

1. **A Reduced Cost Objective**⁴—By applying the frameworks and five management practices, company management can reduce IT costs and retain the contribution that IT makes to the bottom line. IT can perform just as well as before, but at reduced cost.
2. **A Stable Cost Objective**—Company management can continue to grow IT use and keep up with the growth of the business, and yet control the overall IT spend. IT can increase its support of the business and its impact on the bottom line, but at current cost levels.

EXHIBIT 1.3 Possible Outcomes for Companies

3. A “Sweet Spot” Objective—This combines cost reductions with better bottom-line impact. IT can both lower its cost and also improve its performance in terms of bottom-line impact.

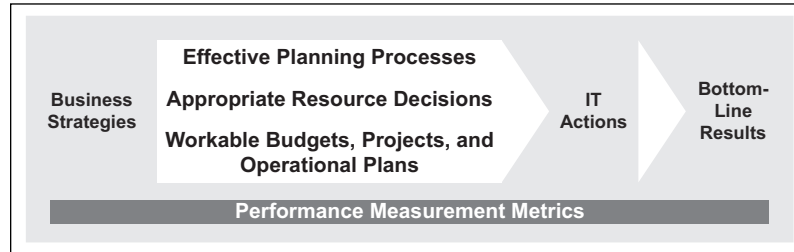
A fourth “Higher Growth” Objective (mentioned in the previous section) may apply to companies experiencing rapid change and/or growth. In this case, the higher IT costs, though controlled, are justified because they produce even greater bottom-line impact. Even in these cases, we can reduce the overall cost increases, thus increasing the bottom-line impact even further.

THE STRATEGY-TO-BOTTOM-LINE VALUE CHAIN

What does it take to control IT costs and produce higher bottom-line impact? Simply, we need effective planning processes, appropriate resource decisions, and workable budgets and plans. We need them to work together consistently.

But companies already do this, managers may say. They work to improve the bottom-line performance of their company.⁵ From year to year, they set budgets for ongoing operations and invest in projects or initiatives to change or add to the business. Managers then expect that new budgets will support better bottom-line performance than prior-year budgets, and that investments in projects or initiatives will produce better bottom-line performance (see Exhibit 1.4).

The practical problem is that most companies carry out planning, prioritization/resource decisions, budgets, performance measurement, and so forth, in silos or stovepipes. We mean this in two ways. First, in management process terms, business planning, IT planning, prioritization, budgets, and performance

EXHIBIT 1.4 Strategy-to-Bottom-Line Value Chain

measurement are poorly connected. For example, a company may have strategies, but its management performance measurement is not consistent with those strategies. Similarly, business and IT planning may not be coordinated. These management processes operate, but not consistently or from a common base of information, and are disconnected. Second, many companies are organized in silos or stovepipes, and the various management activities—such as planning, prioritization, budgets, and so forth—do not take an enterprise perspective nor do they coordinate across the barriers between silos or stovepipes. The business units are disconnected.

Yet, IT has many aspects that, to control costs and assure IT's bottom-line impact, have to operate across silos or stovepipes. IT's infrastructure is a simple example, but the idea extends to the coordination/integration of information systems across silos and to the exchange and integration of information across silos. Certainly, planning, prioritization, budgeting, and so forth have to connect across these silos to be effective.

Disconnects prevent the Right Decisions and the Right Results.

Although we simply need effective planning, appropriate resource decisions, workable budgets, and so on, whether we get them depends on how well the management processes work across silos, both process silos and organizational silos. Operational budgets and future projects result in an improved bottom line only when managers and staff perform budget-setting and project selection well. Budgets and projects themselves are only as good as the planning that produces them. Budgets and projects produce results only when managers and organizations perform effectively, without silos and disconnects getting in the way.

Most companies and organizations have a loose collection of disconnected management processes around IT. For example, in a large consumer products company, business planning does not directly connect to IT planning, which does not connect to company budget processes and management performance assessments. The consequence is that the company's IT investments and ongoing expenditures do not clearly support business strategies; the CEO cannot tell what the company is getting for its investment; and IT managers are frustrated at their inability to communicate what IT is up to and why, to business managers

and the CEO. These disconnects are the problems we intend to solve in order to put the necessary management practices into action.⁶

As it has been more than three decades since these problems first became apparent, there must be more to the problem than simple management process disconnects. We often find:

- Business plans do not drive IT plans.
- IT plans focus on technology rather than directly addressing business strategies.
- Business managers do not see IT as supporting their strategies.
- IT projects do not support business strategies. IT spending on infrastructure and application maintenance does not support strategy.
- Company budgets do not reflect the results of IT planning.
- IT plans are shelfware that does not guide management decisions, projects, or budgets.
- IT governance practices do not direct IT from a business perspective.

These symptoms are characteristic of companies with disconnects. What gets in the way, fundamentally, is different views among business and IT managers about the role that IT plays in the business, the value that IT can bring, and the management practices that are needed to effectively bring IT to bear on business strategies. These different views result from, and in, the failure to plan, align, prioritize, innovate, and measure performance for IT consistently from a business strategy perspective. This failure results from management cultures in business and IT that are incompatible with using a business perspective to manage IT.

Companies need their own version of a Strategy-to-Bottom-Line Value Chain. Readers may recall Michael Porter's work on competitive analysis.⁷ He proposed that enterprises have a *value chain* of connected, coordinated activities that individually and in concert add value to the products and services that an enterprise produces. We take that basic idea and apply it to the management processes that connect the company's planning and strategies to IT planning, budgets, and actions, and to performance management that tracks the results. This is a Strategy-to-Bottom-Line Value Chain where, as in Porter's model, each individual management process both adds value and, working consistently with the other processes, works in concert to reduce or control IT costs and simultaneously improve IT's contributions to the company's bottom line. By examining each management process and applying the tools and practices contained in this book to those processes, a company can "connect the dots" in terms of its processes and optimize its Strategy-to-Bottom-Line Value Chain.

CRITICAL SUCCESS FACTORS

Effective planning processes, appropriate resource decisions, and workable budgets, projects, and plans are the foundation, working consistently across process

and organizational silos. Based on these, we can produce the right IT actions to control costs and, in turn, impact the bottom line. We can control costs at the same time as improving IT's contributions. The problem is, these three elements are bound up in the existing management culture and processes.

We can tell how well a company does in producing our five outcomes (better projects, right project choices, reduced nonperforming spending, improved performance of existing spending, and right management actions) by examining whether:

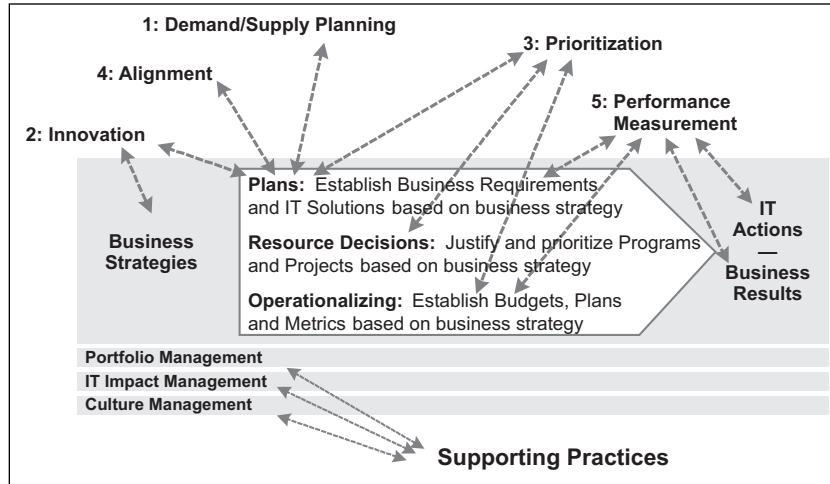
- Business and IT planning processes are fully connected and integrated.
- IT-enabled innovations impact business planning and result in new business strategies and improved ways to implement current business strategies.
- IT investments are prioritized against business strategy.
- The entire IT spend—including development, operations, maintenance, and services—is aligned with business strategy.
- IT business and technical performance is tracked.
- Business and IT management teams consistently execute the management processes that improve IT's contribution to the business's bottom line performance.
- Planning and management processes focus on the entire IT investment, including both Lights-On and Projects.
- IT and business managers participate effectively in these management processes.

To the extent that the above statements are not true in a company, its effective planning processes, appropriate resource decisions, and workable plans simply will not be effective, appropriate, and workable. The IT actions will not be connected to business strategy, and costs will not be controlled, nor will the right results be produced.

These are the Critical Success Factors⁸ for getting Right Decisions/Right Results. We want better projects, we want to choose the best projects, we want to eliminate nonperforming and poorly performing assets and resources, and we want to improve the performance of existing assets and resources. Overall, we want to reduce costs and, at the same time, improve IT's contribution to bottom-line performance. To do this requires attention to these critical success factors.

COMPLETING THE PICTURE: THE NEW INFORMATION ECONOMICS PRACTICES

We have developed five basic management practices that flesh out the Strategy-to-Bottom-Line Value Chain. More specifically, these practices create “yes” answers to the eight CSF questions stated above. These five practices, shown in Exhibit 1.5, are the basis for connecting strategy and results.

EXHIBIT 1.5 New Information Economics Practices

We call this set of five practices “New Information Economics” (NIE) to reflect that they are outgrowths of the original *Information Economics* work described in our first two books. Briefly, we have had almost two decades of experience in applying Information Economics in companies in the United States, Europe, and the Pacific Rim. This experience and our research has led to the five practices, which have been applied in business and government environments.

The five practices in NIE make up a set of tools for IT and business managers to use, embedded in management processes, to translate a company’s business strategies into programs and initiatives that IT can implement. This book describes each of these practices in detail, and gives the reader complete details about what is needed to implement these practices, in whole or part, in the reader’s company. The five practices are briefly defined as:

NIE Practice 1: Strategic Demand/Supply Planning—Translates business strategies into terms that give IT clear direction on what the company intends to do (the company’s “strategic intentions”). Business and IT managers achieve consensus on where the company is going and what IT can do to help. They do this by establishing the business drivers as expressed through management’s strategic intentions, and translating them into the strategic IT requirements needed to fulfill the strategic intentions. Management’s strategic intentions establish the strategic drivers for IT; the strategic IT requirements establish the business’s strategic “demand” for IT, about which IT strategic planning must deliver technology solutions as the strategic “supply.” The result is a strategic agenda for the use of IT in the business that can be translated into strategic IT plans and, ultimately, action.

NIE Practice 2: Innovation—Changes the business strategies through IT capabilities. IT usually responds to business needs. Less frequently, business changes its directions based on the things that IT makes possible. This practice explicitly drives business management to uncover the business opportunities that IT makes possible and also provides a way to feed those opportunities into business strategic and tactical planning. The result is a more robust and competitive set of business opportunities.

NIE Practice 3: Prioritization—Assesses the business impact of proposed IT initiatives, prioritizes those projects, and assigns resources to the highest value projects. The company should spend money only on projects that directly relate to its strategic intentions. This practice tells managers which IT projects strongly support strategic intentions, ranking them by future business impact. The result is money is spent in the right places, for the right reasons, with business and IT managers agreeing on the decisions.

NIE Practice 4: Alignment—Assesses the business impact of existing IT activities. A dollar spent on maintaining existing systems is a dollar not spent on new development. This practice lets business and IT managers together decide which existing IT initiatives should get resources, rather than assuming that everything currently operating is critical for the business and should be supported at existing levels. The result is a more reasoned approach to spending money for existing activities, which often results in money made available for new development.

NIE Practice 5: Performance Measurement—Measures IT performance in ways that relate to the business. It is easy to measure IT's performance in operational and tactical terms. It is hard to measure IT's impact on the business. This practice blends the two and allows IT to determine what to measure, how to manage IT based on those measures, and how to communicate its performance to business managers in ways that they can understand. The result is improved IT performance and improved communication with business management.

Practice Support: IT Impact, Portfolio, and Culture Management

The five practices are supported through value, portfolio, and culture management concepts. IT Impact Management deals with one part of the company's management culture and offers a framework and vocabulary to state what is important to the company. Portfolio Management makes it possible to consider the entire IT spend, providing a holistic framework for making priority and investment management decisions. Culture Management enables the company to deal with its existing culture in the company in order to remove barriers to management process change.

Business Value Maturity Model™

Company management culture, along with limitations on the company's ability to execute NIE practices, are significant constraints on management's success in adopting new management processes based on NIE practices. The Business Value Maturity Model™ helps a company to identify and overcome the two factors of culture and limitations on the company's ability to execute. We describe desired business outcomes for each NIE practice areas, and we use "maturity" as the measure of whether the company can produce the outcomes based on a combination of culture barriers and company capability to act on the results.

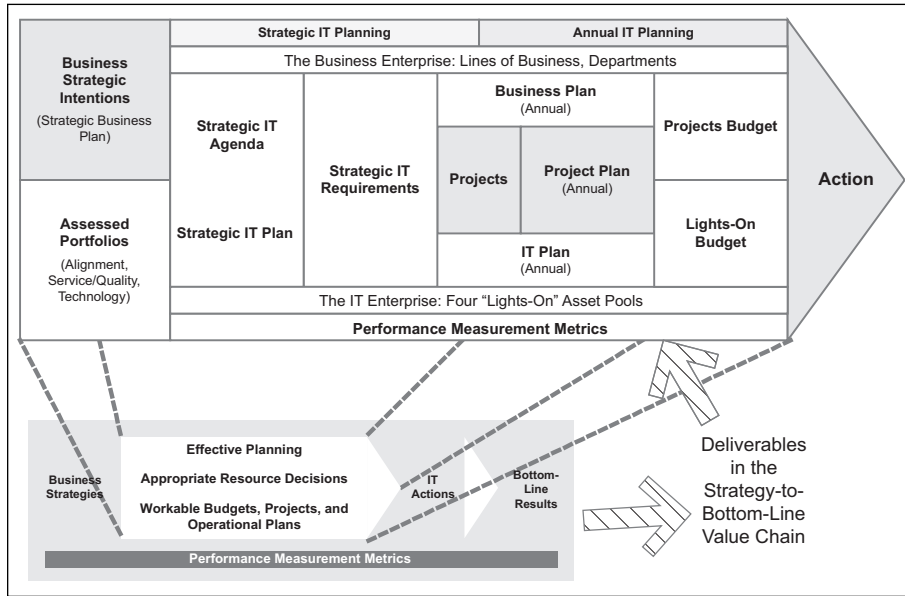
Connecting with the Strategy-to-Bottom-Line Value Chain

Each NIE practice creates outcomes that help a company better connect its IT investments to its business strategies. For example, the *prioritization* practice connects IT investments to business strategic intentions; the *performance measurement* practice tracks progress in producing the desired business results. Getting these outcomes from NIE practices is half the battle. The other half is to follow through with the right actions in the business and IT organizations to actually produce the desired business results. This requires an unbroken string of company business and IT management processes that consistently apply the outcomes of NIE practices. NIE practices may be embedded in the company's existing management processes, and practice outcomes should result in changing how those processes operate.

Exhibit 1.6 expresses this embedding as a value chain of connected management processes leading from business strategy to action. The value chain is expressed as 12 specific deliverables produced from the management processes. Each process adds value to the overall Strategy-to-Bottom-Line chain by means of these deliverables, ensuring that the following processes and their deliverables are consistent and remain focused on business strategy. The connections and deliverables ensure that the necessary IT and business actions become part of business and IT organization annual plans, and that those actions will occur. Moreover, if relevant performance measurement metrics are established, management can track the actions and their results. The connection to the annual plan, and to the performance measurement metrics, is critical to assuring that the right action occurs and the right results are produced.

Twelve elements make up the Strategy-to-Bottom-Line Value Chain.⁹ They start with the company's strategic intentions (Strategic Business Plan) and continue up to the Operational Plans covering the actions of each business unit, both business and IT. Exhibit 1.6 symbolizes the goal for Right Decisions/Right Results in terms of the NIE practices providing the foundation and connections for producing the elements in the Strategy-to-Bottom-Line Value Chain. The key point, however, is that most of the underlying management processes or deliverables will already exist in a company. The trick is to coordinate and connect them using the NIE practices.

EXHIBIT 1.6 Strategy-to-Bottom-Line Value Chain



The value chain is a management process view of how things need to work. There is a lot more to it than just getting the management processes right. Specifically, a company’s existing management culture determines whether or not such a value chain can be successful. Whether the company’s leadership teams can play the roles and support and carry out the results, is critical.

This book outlines how all elements of the company’s activities, including management culture, can consistently apply the concepts and principles of Right Decisions/Right Results and New Information Economics practices. Our goal is to enable a company to achieve an effective Strategy-to-Bottom-Line Value Chain. We describe the five key New Information Economics practices and the role they play in management processes. We outline the value chain in the company’s management processes, and the roles that the company’s senior, business, and IT leadership teams play in it. We examine management culture and how management culture supports each practice. We introduce the Business Value Maturity Model™ as a tool for assessing where the company currently stands in its Strategy-to-Bottom-Line Value Chain. Through Culture and IT Impact Management, assisted by the Business Value Maturity Model™, we address process and culture change issues.

Right Decisions/Right Results: Getting to the Right Actions Is the Key

Too often, we find companies that do have good planning practices, do alignment and prioritization well and employ good enterprise architecture practices,

yet fail to get it all together in the form of action. Action, after all, is what produces results. In our view, action that produces the right results is all that really matters.

What do we mean by “right action”? An easy way to think of it is: For every business strategy, whether corporate, line of business, or functional, IT should have a clear idea of *exactly* what it is doing to further the strategy. IT should also have a clear idea that those things it is doing that do not connect to strategy should *not* be done. This is the basis, ultimately, for controlling cost at the same time as improving bottom-line impact.

SUMMARY OF THE BOOK

This book is about controlling spending and choosing the right things on which to spend. This problem applies to every part of the business. In every case, managers need to control spending, choose the right things to spend on, and thereby control costs and improve impact.

Controlling spending means controlling the total of all spending, the aggregate of all IT spend for a company. This includes everything from operational costs to project costs. It includes expense and capital, as well as depreciation and amortization. The goal is to understand what the company spends and then keep that total spend within parameters established by management.

Choosing the right spend means, within the total of all spending, making the best choices about the detailed expenditures. While “controlling spending” means keeping the total within the desired parameters, “choosing the right spend” focuses on each line item, determining its performance and contribution to the bottom line.

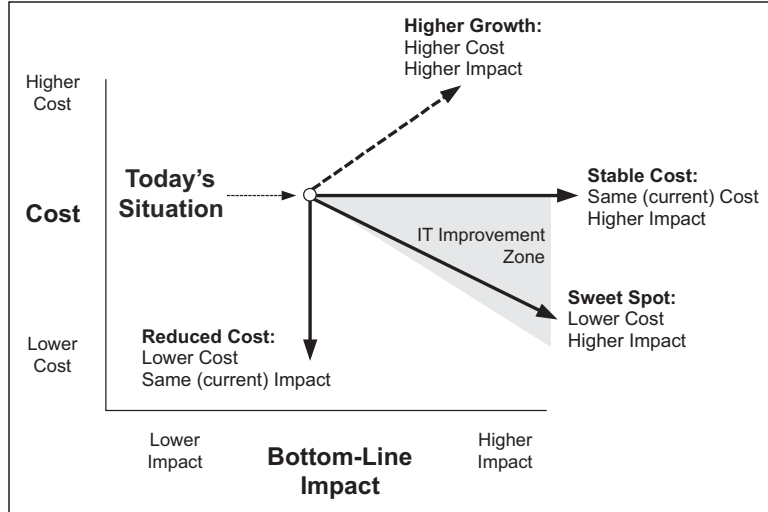
You are likely to be reading this book because you believe your organization must improve how it directs and applies IT. You believe that IT should produce greater value and have a greater impact on organizational performance. You want to know that you are spending IT resources on the right problems, and you need assurance that the IT resources produce value. You want to get action and produce the right results from IT.

Further, you are interested in understating how your company can get Right Decisions and Right Results, as shown in Exhibit 1.7. Ideally, you want to achieve the “sweet spot.”

This book describes the framework, the NIE principles and management practices for applying them, and the changes in management culture that result. The book is the outcome of the authors’ research, teaching, and consulting engagements over the past 20 years.

Beyond merely describing these elements, this book explains in practical terms what it takes to implement the principles and practices in the business environment. Using a Business Value Maturity Model framework, the book also addresses ways to assess an organization’s readiness for implementing and utilizing the tools, and gives practical advice for implementing the cultural and process changes required. The book also explains the “takeaways” for business

EXHIBIT 1.7 Our Goal in the IT Improvement Zone



and IT management, detailing the overall benefits that the management team will realize from adopting these frameworks.

MANAGEMENT AGENDA: CRITICAL SUCCESS FACTORS

The following is a self-examination for the Critical Success Factors for Right Decisions/Right Results.

Management Question	Yes or No?	If "No", What Is Our Plan for Correcting This?
Are business and IT planning processes fully connected and integrated?		
Do IT-enabled innovations impact business planning and offer new business strategies?		
Are IT investments prioritized against business strategy?		
Does the entire IT spend, including development, operations, maintenance, and services, align with business strategy?		
Is IT business and technical performance tracked?		
Do Business and IT management teams consistently execute the management processes that improve IT's contribution to business bottom-line performance?		

Management Question	Yes or No?	If "No", What Is Our Plan for Correcting This?
Do planning and management processes focus on the entire IT investment, both Lights-On and Projects?		
Do both IT and business managers participate effectively in these management processes?		

The balance of this book provides answers to the question: "What is our plan for correcting this?"

ADDITIONAL READING

The book's website contains additional information:

Website Note 8: Gap Analysis: Closing Disconnects between Business and IT

Website Note 9: Building an IT Profit Model

The appendices also contain related information for Chapter 1:

Appendix C: The Development of Strategic Intentions, with Examples

NOTES

1. Our European friends prefer the more inclusive term Information and Communications Technology (ICT.) Our use of "IT" includes communications technologies.
2. As we noted in the preface, while the terminology used here and throughout the book is in business terms, the concepts and practices apply with equal force to government and nonprofit organizations. While business is concerned with competitive strategy and bottom line outcomes, government is just as concerned with strategy and performance to organizational mission.
3. Our thanks to Joe Barkley and Fabrice Forsans for introducing this term to us as it applies to the ongoing operational component of the IT Spend.
4. Our objective is the effective management of overall IT costs. Cost objectives, as we apply them in the scenarios, take unit cost reductions and demand changes into account. We do not focus directly on unit costs but rather on macro-level IT costs. We focus on demand in terms of increasing high-value activities and reducing low-value activities.
5. Executives for government and nonprofit agencies also work to improve performance. Rather than "bottom line," they work to improve agency mission performance. Throughout this book, we typically use "bottom line" terminology. However, our concepts and practices work equally well for "mission performance" and "mission impact."

6. For an extended discussion of the origins and challenges of business/IT disconnects, see Website Note 8: Gap Analysis—Closing Disconnects between Business and IT.
7. Michael E. Porter, *Competitive Strategy: Techniques for Analyzing Industries and Competitors* (New York: Free Press, 1980) and *Competitive Advantage: Creating and Sustaining Superior Performance* (New York: Free Press, 1985).
8. J. Rockart, “Chief Executives Define their Own Data Needs,” *Harvard Business Review*, March–April 1979.
9. See Chapter 6 for a complete description of the 12 Value Chain deliverables.