CHAPTER 1

Hell Freezes Over

IT Becomes a Key Component of Your Organizational Strategy

Marissa nearly chokes on her champagne when she feels a hearty slap on her back. Pausing a moment to compose herself and prevent any bubbly from escaping, she swallows and turns to see a beaming smile from her colleague Jim, the Chief Executive Officer (CEO) of Breakthrough Corp.

"I can't believe we've had such a successful product launch," his deep voice boomed, the excitement radiating through his usually stoic countenance.

"Two years ago when you approached me and said that IT could be the 'strategic weapon' that gets us to market more quickly and lowers our product development and support costs, I almost fell out of my chair. Who would have ever thought my CIO would be the 'ace in the hole' when it came to executing our strategic objectives?"

We live in one of the most interesting times in the history of the corporate Information Technology (IT) organization. Markets are

continuing to expand globally, generating unprecedented opportunities for growth while at the same time imposing the threat of new and hungry competition, willing to deliver products and services better, cheaper, and faster. Labor pools have rapidly shifted, creating commodities out of what were once hot skill sets in a matter of months, and engendering positions and functions that were never dreamed of a few short years before.

At the same time, technology has "grown up" in the corporate world. As computers became affordable and reliable at the close of the 20th century, corporations rapidly adopted their use, seeing the promise in a tool that allowed for automation of routine tasks, and the ability to speed information gathering, processing, and analysis. The growing complexity of technology created the need for engineers, programmers, analysts, and eventually a cadre of managers to oversee this group of specialists. As technology further engrained itself within the corporation, this ragtag group crystallized into a specialized function, charged with maintaining the technology assets of the entire organization: IT as a corporate function was born.

More recently, IT has permeated nearly every corporation, large and small, even invading the C-suite, with the role of Chief Information Officer (CIO) becoming increasingly prominent. While the CIO title has been around for the better part of 30 years, it carries a fair amount of baggage, lacking the clout with the CEO that is generally held by the Chief Financial Officer (CFO) and Chief Operating Officer (COO). Many even joke that CIO really stands for "Career Is Over," indicating that the CIO position is as far as one can expect to advance when he or she has been "tainted" by a technology background.

Too often, even the best CIO is seen as a technologist, rather than a businessperson by his or her peers. The CIO is generally the last to be consulted on strategic initiatives, and is seen as providing a utility-like service to the corporation: a service that should be delivered at an increasingly high quality with an ever-decreasing budget.

The CEO is facing a similar dilemma. Productivity gains and competitive pressures have placed amazing demands on his or her leadership skills. Costs must be tightly managed and every modicum of market share increase must be battled for, against an increasingly hungry group of competitors in a global marketplace. Cost-cutting efforts, and the addition of new "business systems," either technology-based or process improvements such as Six Sigma or Lean, can help, but these can be easily applied by the competition. Cost cutting can go only so far until service levels and quality decrease, and organizations become pennypinchers to the point of becoming miserly in their dealings with customers.

Why Do You Need Breakthrough IT?

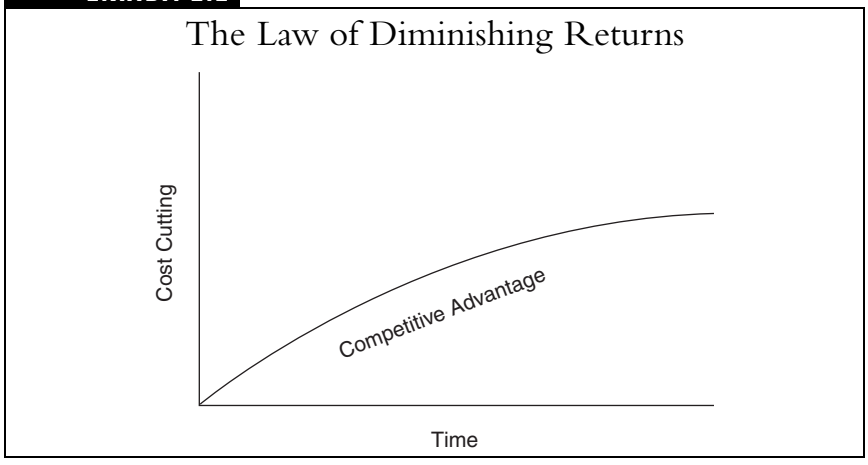
In this business environment, the IT organization has reached a crossroads. Commodity hardware and increasing availability of pre-packaged software functionality further the case for designing and managing IT as a low-cost utility. Should the CEO and CIO, with the help of other executives, strive for "best-in-class" utility status in their IT organization, or is there a way to transition IT from a utility that delivers cost savings, to a competitive weapon that delivers organizational value?

After the heady days of the technology boom, technology spending has been largely rationalized, and cost-cutting efforts have created

effective utility-like shops. Companies strove to gain competitive advantage by further managing their costs; if you were similar in size and market to your competitor, but could get your product to the customer in a slightly less expensive manner, you could gain a competitive advantage. While this logic holds sound, most surviving companies have cut their costs to the point that further cost cutting no longer generates large competitive advantage, but rather diminishes service levels; the economic Law of Diminishing Returns comes into play as pictured in Exhibit 1.1.

Competitive advantage is no longer a simple matter of who can cut costs the most. As corporations at large, and in IT departments in particular, butt against the Law of Diminishing Returns, a better solution must be found. That solution is focusing on IT as a means to produce measurable business value, just as with any investment considered by the executives in a corporation. Banal statements from vendors about increasing return on investment (ROI) and the like must be replaced by a rigorous focus on measuring, tracking, and reacting to what value IT is producing. The companies focused on turning their IT

EXHIBIT 1.1



department into a means to produce value will be leaps ahead of those continuing to focus on reducing costs. While your competitors spend time pondering the expenditure of each penny, your organization can be measuring the dollars produced by using IT as a strategic lever.

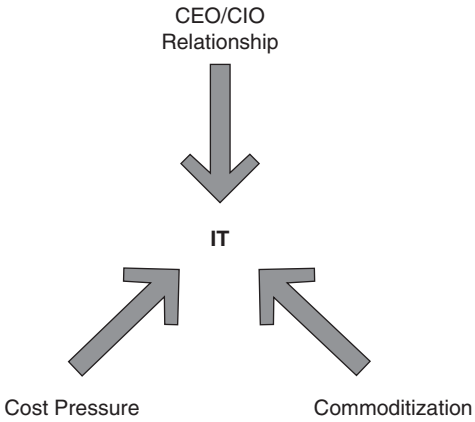
The need for the Breakthrough IT organization stems from the current corporate environment, and the "triple threat" of costs, commoditization, and the CEO/CIO relationship. A "utility" IT organization can never adapt to this new environment, and the Breakthrough IT organization provides an evolutionary response that both minimizes the operating costs of IT, and focuses on generating returns—a "one-two punch" to provide real competitive advantage.

The Triple Threat

The "triple threat" facing the corporate IT function is depicted in Exhibit 1.2. As each element increases its pressure on the IT organization, the impetus for action becomes increasingly critical. As this

EXHIBIT 1.2

The Triple Threat Facing IT Organizations



pressure mounts, the CEO and CIO must take action to determine the future direction of the IT organization, before external pressures force their hand, precipitating a decision that may not be in the best interests of the corporation.

Threat: CEO/CIO Relationship

IT could use a lesson in "relationship marketing," especially when considering the working relationship between most CIOs and their counterparts in the C-suite. With the IT organization having originally been a group of technicians (engineers, programmers, developers, and the like), the CIO in many organizations has been groomed in an engineering environment. While C-suite colleagues were sharpening their leadership skills and managerial pedigree, the CIO often gained the perception of being an "über-technologist," frequently being derided as the geek who leads the other geeks. Many CIOs blindly follow this trend, considering themselves technologists first, and businesspeople a distant second.

This threat creates a customer/provider relationship between the CIO and other executives. The CIO is a manager charged with providing a service, to be invoked at the bequest of other groups within the organization, and as an ancillary or support function of these other organizations. The larger IT community of vendors and the IT media propagate this image, developing products touting "on demand" computing, or "utility computing." The result is that IT is effectively relegated to the role of an internal vendor, rather than a potential strategic partner within the organization.

When new product strategies are unveiled, or new sales and marketing programs are developed, the CIO rarely plays a role in the decision process, and often hears of these programs only when current systems fail to accommodate any new processes necessitated by the change in strategy or new products and services.

Conversely, most CEOs would rarely consider involving the CIO in the strategic decision-making processes. The über-technologist CIO comes to such discussions eager to jump to a recommendation on the latest technology or system that might be relevant to the topic at hand, often bringing solutions in search of a problem to the table. A systems focus adds little value to the formulation of a new strategy, and despite many vendors' claims to the contrary can hinder the execution of strategy.

This systems focus reinforces the role of IT and the CIO as a service provider, akin to an internal vendor. When a strategic direction has been chosen, the people aligned, and the policies and procedures put in place to execute it, only then is the CIO summoned to build any necessary systems around the processes.

Threat: Cost Pressure

From the mailroom clerk to the CEO, every employee of the modern corporation has felt the pressure to do more with less, and cut costs wherever possible. New corporate leadership often comes in wielding a cost-cutting axe, attempting to increase shareholder value by trimming organizational fat. This effect can be especially intense in IT organizations. Too many IT shops justify their existence based on uptime figures and service levels, rather than making a case that they

deliver measurable business value, rendering IT an easy target for cost cutting and budget reductions.

As cost pressures mount, justifying budgets based on service levels becomes increasingly difficult. The inevitable question is, "What happens to our service levels if the budget is dropped by a few more percentage points?" Like most good managers, CIOs heroically struggle to meet targets with fewer resources, further cementing the view that IT funding can be continually cut until a "sweet spot" is found. In addition to ongoing operations, cost pressure impacts work carried out on a project basis. If a project is behind schedule or using more resources than were anticipated when the business justification for the project was completed, cost becomes an ever-greater concern.

CIOs generally rely on incomplete information about the state of such projects, measuring the work completed on various components of the overall solution, without a solid grasp on the overall status of the project. Projects are also rarely related to measurable business value, beyond the initial business case and benefit analysis, making it difficult to justify additional investment in the project when cost pressures mount. CIOs speak in a language of technical deliverables that conveys incomplete information to the CEO and CFO, who are more concerned with ROI than how many technical objects have been produced.

Threat: Commoditization

The IT industry has rapidly gone from a profession built on the technical knowledge of its employees, to a broad marketplace where technical skill and specialized software can be purchased at a commodity price, or even for free in the case of open source software. IT long

enjoyed a measure of protection as it was a specialized area with strong "knowledge capital" stored in the many custom systems built by most large corporations over the years. In the 1980s, commoditization started in the software arena, with software vendors such as SAP creating software platforms with prebuilt business logic, providing an alternative to custom-built software for core business functionality at a significantly reduced cost to custom systems.

The wide adoption of package software brought about another change to the engineering specialist mentality, and the associated protections it provided to an entrenched IT group. If you know the latest word processing application and how to use it at one company, it will work in the exact same manner should you move to another company. In this same vein, developers and users alike of packaged business software can enter a new corporation with an established base of knowledge about their corporate systems before stepping through the door. Specialists who developed an archaic legacy system were no longer critical employees of the company once package software replaced highly specialized technical knowledge with knowledge of commodity software, which delivered the same set of standard functionality and processes in each installation.

Global markets, long bemoaned as causing the death of manufacturing jobs for many western countries, are now able to compete for IT jobs as well. The wide installed base of commodity business applications and easy availability of communications technologies have allowed increasingly higher-level work to be farmed out to the lowest bidder. This phenomenon has also engendered the development of large outsourcing organizations. As an IT function becomes commoditized, it favors economies of scale that often cannot be matched by an

internal IT department. From marquee brands like IBM to newly formed companies in Cambodia, there is increasing competition to provide effective, commodity IT services at very low price points.

The Convergence of the Triple Threat

The confluence of the changing CEO/CIO relationship, cost, and commoditization has brought organizations to a critical decision point. The IT shop can continue to be an engineering/specialist organization, focused on providing technical services to various components of the business on an as-needed basis. Many CIOs have grounding in project management, or at least a reasonable amount of management and budgeting experience, so this role may come naturally. A "traditional" CIO reviews his or her roster of projects and ongoing operating costs, making a "pitch" to the CEO for sufficient funding. Focus in these meetings is often on how spending will help maintain the existing systems, and any new expenditures will offer enhanced technical capability to the organization, or replace aging platforms that have become costly to maintain. Other than perhaps in a general sense, fitting these expenditures into a context of a financial investment is rarely done.

Existing custom systems may necessitate the retention of the resources who initially built those systems, and if the CIO can maintain his or her IT organization in a reasonably cost-effective manner, he or she can delay any dramatic changes to their organization. Trapping specialized knowledge in legacy systems makes a strong case for an IT organization filled with the same specialists who originally developed, managed, and maintained the system, although this position is

becoming increasingly risky with the arrival of commodity business software, and commodity technical skills available to enhance and maintain it.

Even the more "progressive" CIO who adopts commodity hardware and software, and runs his or her IT shop as a highly effective "internal vendor" is not immune to the effects of the triple threat. The technology press and many hardware and software vendors have encouraged this approach, trumpeting the cost savings of their various products. Terms like "On Demand" computing that imply the CIO and his or her organization is silently operating behind the scenes, to be invoked only when required—a "just-in-time" service organization of sorts that can be activated, or worse, "turned off" on the whims of external forces.

While specialized expertise and effective management of IT as a service may enhance the CIO's bargaining position in the near term, the triple threat is here to stay. When the CIO elects to take the aforementioned path, by the very nature of designing his or her organization to be an "internal vendor," he or she will be increasingly perceived as a vendor. This internal vendor, however, is saddled with uncompetitive high costs, versus a specialized external vendor. Employees must be retained to cover all the technical aspects of the business, and provided with healthcare, real estate (if you can call a cube farm "real estate"), payroll costs, and associated benefits. As the CIO navigates this burdensome cost structure, and becomes an increasingly competent internal vendor, the CEO eventually will make the natural comparison with external vendors who can assume control of some aspect of IT operations, or in many cases, assume the responsibility of the entire IT department by providing personnel, systems, and staffing.

Even the largest of corporations with the most effective IT departments can rarely compete with specialized external vendors, who can provide similar technical skills, purchased at a commodity price and at a lower cost through economies of scale. While your organization may need ten people to manage its network, a vendor may likely be able to serve five clients with a similar number of employees. The vendor can also call on shared internal staffing and knowledge resources on a massive scale, and on a true "on demand" basis. While any IT department can hire specialist consultants and contractors, it takes time to locate an appropriate party and bring him or her onsite. The external vendor, however, often has a specialist already on the payroll, to be deployed as needed within hours' notice instead of days or weeks. Competing with these organizations becomes nearly impossible when the CIO is in the role of a basic service provider.

From a CEO's perspective, if his or her CIO has cemented their relationship as a service provider, even a competent one, it makes the comparison with external vendors that much easier. IT generally is a very costly component of the corporate cost structure, and any reduction in that cost will be considered carefully. Like any other vendor, the CIO becomes only as good as his or her last "invoice."

Hell Freezes Over: IT Enables Strategy

Clearly, IT's attempt at being a low-cost service provider is a losing proposition to the CEO and CIO. With IT serving as a utility, the CIO is limited in his or her career progression. Even if the CIO manages a utility-like IT organization in a highly effective manner, that person will likely lack visibility to the strategic functions of the business, and

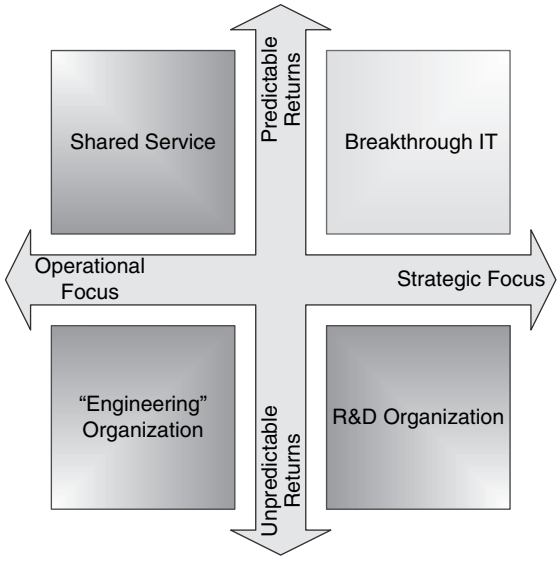
be passed over for consideration for higher positions. For the CEO, IT is little different from any other utility. While electricity and phone service are critical to a company, the CEO expects that these utilities continue to function with complete reliability, and rarely scrutinizes these services unless seeking to cut their costs while maintaining a reasonable level of service.

What is needed then, is not striving to make IT cheaper, but to make IT generate measurable monetary returns to the business. Rather than each dollar of spending on IT being regarded as a sunk cost, if IT can generate proven returns on each dollar as an *investment* rather than a cost, IT becomes a powerful tool for generating competitive advantage. What is needed is a Breakthrough IT organization.

As business has evolved in the past several years, smart organizations have tended to flatten operations, streamlining reporting relationships, and breaking down traditional department structures. For example, in product engineering circles, engineers strove for a greater understanding of the manufacturing process, and made conscious decisions during the product design process to make products easier, quicker, and cheaper to manufacture. More recently, this concept has spread to other functions of the organization. Marketing was often left to develop marketing programs and campaigns after a product had been fully developed and production was in full swing. Current thinking, however, encourages companies to make marketing a critical aspect of product design, admonishing companies to build products for marketability *and* manufacturability. As depicted in Exhibit 1.3, Breakthrough IT is the next evolution in this process, and involves two key components: integrating IT with the design and execution of business strategy, and transitioning the corporate IT function from a center of

EXHIBIT 1.3

Breakthrough IT Is the Combination of a Strategic Focus with Predictable Returns on IT Investment



engineering expertise to a center of business process excellence founded on predictable returns on IT investment—in short, managing IT like any other business unit.

In the Breakthrough IT organization, IT is built into each venture the company embarks on. Products are designed with the input of each business unit, including IT. Rather than IT being recruited to build support for new products or business processes into inflexible systems after the fact, a cadre of process experts from the IT department designs processes and technology *into* the product from the outset. Instead of focusing on, and prematurely recommending, a specific technology, they design an efficient process first, and then look for areas in which technology could improve that process. The IT organization is less

"geek," more business-process focused, from the CIO down to the most junior analyst. This process focus also makes IT increasingly "portable." By focusing on simplified and repeatable processes, IT operations can be moved to internal or external providers, and even across continents with relative ease.

Action Points

Action points provide concrete steps you can use to begin implementing ideas from this chapter. For this chapter, the action points are:

- Discuss the concepts of the Breakthrough IT organization with colleagues in the C-suite. Gauge their reactions and begin to gain conceptual agreement on the transition to Breakthrough IT. Do not strive for full commitment at this point; rather, get the ideas on the table for future consideration.
- Begin thinking about utility functions IT is currently managing internally. Future chapters will cover selecting which components of ongoing operations should be sourced and where, either internally or externally. The sooner you begin investigating options, the easier it will be to narrow down a detailed list of functions to transition away from your IT group's primary focus.
- Take a good look at your CIO's experience level and position in the organization. Does he or she have excellent management experience? Has that person managed a P&L (profit and loss)? Does he or she have a business process focus, or is that person an ''über-technician?'' Discuss this assessment and begin investigating coaching or leadership development options that will give the CIO the strategic acumen and

ACTION POINTS (CONTINUED)

leadership skills necessary to implement business strategy through IT.

- For the CIO, investigate current strategic imperatives for your company: new product developments or introductions, sales initiatives, competitive threats, and the marketplace in general. Begin to consider how process changes, facilitated by technology, may enable the strategic direction of your company and help it to react to competitive pressures and the changing business environment.

EXECUTIVE SUMMARY

In this chapter, we discussed the origin of the CIO and the formalization of Information Technology as a corporate function. IT began primarily as an engineering function, comprised of people with a high level of technical expertise, tasked with maintaining complex and often highly customized systems. More recently, the trend in IT is to design the organization as a low-cost, ''utility'' function: delivering a service to other business units on an as-requested basis at the lowest possible cost. While this style of management has lowered overall IT spending in most organizations, the balance between low cost and acceptable service quality is being reached by most organizations. Further cost cutting only degrades the quality of service, thus limiting the competitive advantage that can be garnered by further cutting of IT costs.

This point of diminishing economic returns is combined with the ''triple threat'' facing IT: the CEO/CIO relationship, cost, and commoditization. The utility nature of most organizations has turned the CEO/CIO relationship into one of customer to vendor,

Executive Summary (continued)

and often the CIO has encouraged this relationship by attempting to make IT a low-cost internal service provider. The customer/vendor dynamic relegates the CIO and his or her IT organization into a simple service provider that can only compete on cost. The CIO is not a trusted peer of the CEO, and adds little value to the C-suite aside from how cheaply the CIO can provide a commodity service.

The threat of cost is that it is the primary benchmark by which a utility-style CIO and IT organization are judged. Internal organizations, be they IT or purchasing, have cost structures that simply cannot compete with large outsourcing firms that often can perform a business function at a lower cost and with higher quality due to the breadth of resources at their disposal.

Commoditization has helped the utility CIO cut costs by using standardized hardware, and increasingly commodity business software, that delivers prepackaged business processes and allows access to a large pool of talented people already experienced with the software. While software from companies such as Microsoft, Oracle, and SAP has provided cost advantage, competitors can purchase and implement the same solution, mitigating any competitive advantage incurred by the software itself, and the associated savings in maintenance costs.

This triple threat provides incentive for organizations to seek a method to use IT not as a low-cost utility, but as a business function that can generate measurable business returns. To build the Breakthrough IT organization, the CIO must effectively source all utility elements of the IT operation, either to an internal vendor or to an external provider. This frees the CIO to pursue a peer-level partnership with the CEO, using IT to speed the implementation and ROI generation of business strategy. The steps to accomplish this task are detailed in the remainder of this book.