

## CHAPTER 1

# PERFORMING WITH A NET: BECOMING A NETWORK- CENTRIC BUSINESS



Creating and sustaining a successful small-medium business is a formidable challenge. U.S. Census Bureau statistics highlight the fact that 10 percent or more of such businesses close their doors each year. Clearly there is no magic elixir for achieving success, or all business leaders would be quaffing it.

In spite of the challenges they face, growing companies can improve their odds of being one of the success stories. It just requires that they choose the right business focus, hire and retain talented employees, enlist competent advisors, engage reliable financial and business development partners, and adopt the right business technologies. The right technologies support growth, stimulate productivity, improve operational efficiencies, and enhance customer satisfaction. Simple, right?

Not exactly. Companies differ. There is no one formula for success. Each business must define its own targets and chart its own unique path to growth. In all the diversity and choices that can be made, there is one key given: technology. Technology is the common denominator that is needed across all businesses. Technology is essential to allow businesses to achieve more with less in tough times and to propel their momentum in good times. Internet technologies such as broadband, wireless, IP telephony, switching, and routing are vital resources to the opening and expanding of markets for small-medium companies. They allow smaller companies to be more adaptable and agile and to appear larger than they are. How Internet technologies can do this, and the unique business and investment value each technology can deliver, are discussed throughout this book.

Although Internet technologies can be powerful assets, business leaders must be committed to change if they plan to implement them and their associated applications. Workflows and processes, by necessity, must become more streamlined for these technologies to deliver on the promise of greater efficiency and cost-effectiveness. If executives are dead set against change and want to maintain the old ways of operating, there is no good reason to expend the fixed and recurring costs associated with making a company network-centric. Business technologies should be adopted only as a means to effect business process transformation, achieve a company's objectives more competitively, and deliver stakeholder value, not just to automate existing functional processes.

Along with process change comes organizational dynamics change. As small-medium businesses adopt Internet technologies for their asset value, they also tend to move away from relying on information technology (IT) as a pure support

function to treating it as one that is more collaborative and integral in nature. Generally, business and technical decision-makers start working together more closely to chart the company's strategies and plan jointly how best to execute them. In fact, one of the key objectives of this book is to foster and promote closer collaboration between these decision-makers.

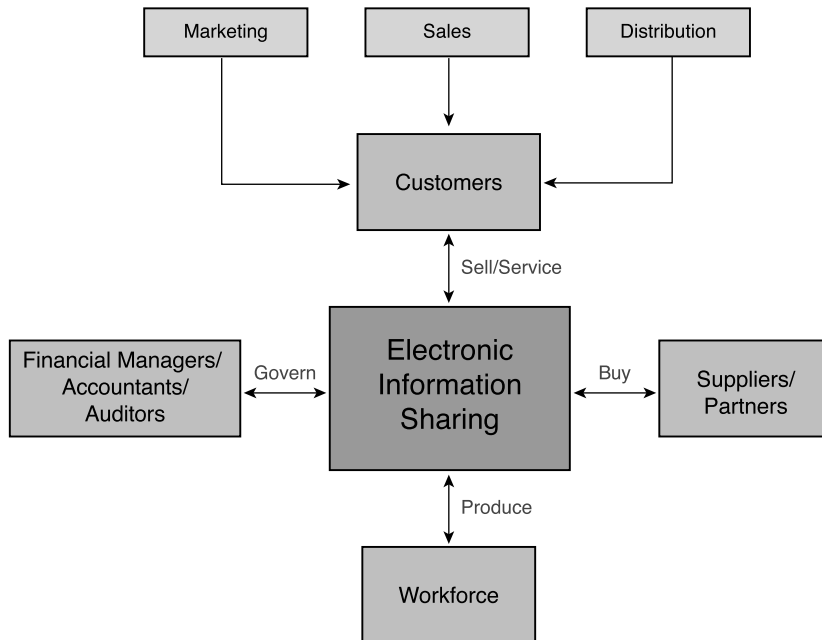
These new cross-functional collaborations are effective only if IT decision-makers understand how their business is measured for success and can justify technologies in business-relevant language. Conversely, business decision-makers must become more technically savvy—at least to the extent that they are familiar with the leading technologies and how they can help increase business value. By working together, rather than separately, business and technology executives can pool their knowledge and skills to generate tangible business value from all their investments, including Internet technologies.

Companies that are pursuing the transition to network enablement are often called electronic businesses (or e-businesses). Interestingly, virtually no executive at these companies, if asked, would say unprompted, "We are an e-business." Part of the reason for this is that companies using Internet technologies and associated business applications have adopted them incrementally and now take them for granted. As soon as a company has integrated technologies and applications into its core business operations, the "e" in e-business seems redundant; it is just assumed to be the new business as usual. At least, that is the ideal: for Internet technologies to become intrinsic to the conduct of successful business processes and practices (and therefore to be unobtrusive and invisible to end users). Technology for technology's sake is unacceptable.

## **The Business-to-E-Business Evolution**

An e-business relies on the application of Internet and related technologies to the business and to the integration of a company's systems, processes, organizations, and value chains. Figure 1-1 shows the types of interactions that occur. E-business enablement is more than web commerce. It is about using technologies to improve productivity, efficiency, and profitability. Research shows that e-businesses, on average, tie together 39 percent of their customer, supplier,

and partner value chain members. In doing so, their spending on e-business projects has risen every year since the burst of the Internet bubble in 2000, to the point where it now comprises 28 percent or more of all technical spending.



**Figure 1-1** *E-Business Relationship Model*

## **E-Businesses Mirror Traditional Business Management**

Actually, the underpinnings of being an e-business are not radically different from that of traditional, offline business management. The same principles apply. It is just the ways in which they are put into practice that differ. For that reason, e-business capabilities can be applied to all businesses. What most often drives the move to deploy e-business systems and applications is the desire to provide convenient customer service, to become more effective in dealing with partners, and to improve process efficiencies to achieve cost savings. Here are some reasons

small-medium business executives give for their investigations into e-business enablement:

- Their customers expect increasingly faster service, self-service, and more extensive product and service selections.
- They want to attract new customers across broader geographic markets.
- They must start delivering goods and services more quickly, often in real-time, to remain competitive.
- They cannot handle the management of all company processes, at the quality levels desired, with their limited resources and current systems. They deal with this by keeping essential, mission-critical processes (those that contribute to the business's competitive advantage) in-house and streamline them using Internet technologies. If critical processes must be outsourced to service providers, e-business leaders maintain tight control over how they are operated and ensure that electronic linkages with the in-house processes are enabled. Functions and processes that represent no immediate risk to the business's sustainability are entrusted to others, with little concern about controlling their management.

## **E-Business Applications and Technologies**

E-business applications, and the Internet technologies that enable them, are typically adopted progressively, in steps. Companies start with those that are more tactical and then gradually migrate to ones that are more strategic and collaborative in nature. The nine types of e-business systems described in this section are those that small-medium businesses most often implement. Their order corresponds to commonly followed deployment phases.

Table 1-1 summarizes the network technologies that small-medium businesses have installed to support such applications. The technologies highlighted in the table allow e-business applications to operate at high speeds (high performance) and with security, confidentiality, flexibility of location, and systems reliability. This usually results in a desirable level of customer satisfaction and workforce productivity, as well as cost savings for the company. Given the redundancy with which the same Internet technologies appear in the table, it

should be evident that they are versatile. Company leaders therefore should ensure that their network technology investments are leveraged to their fullest extent. To help understand how best to do that, each Internet technology listed in the table is explained fully in subsequent chapters of this book.

**Table 1-1** *E-Business Applications and Enabling Internet Technologies*

<b>E-Business Application</b>	<b>Enabling Internet Technologies</b>
Customer care	Broadband infrastructure, IP telephony, wireless LAN (WLAN), security, virtual private network (VPN), intranet, extranet, storage network
Web marketing	Broadband infrastructure, IP telephony, storage network, security
E-commerce	Broadband infrastructure, IP telephony, extranet, security
Web communications	Broadband infrastructure, WLAN, IP telephony, security
E-procurement	Broadband infrastructure, security, extranet, VPN, intranet, IP telephony, WLAN, storage network
Financial management	Broadband infrastructure, security, storage network, VPN, intranet
Workforce optimization	Broadband infrastructure, WLAN, VPN, intranet, security IP telephony, storage network
Manufacturing and distribution	Broadband infrastructure, security, extranet, VPN, intranet, IP telephony, WLAN, storage network
Sales force automation	Broadband infrastructure, WLAN, VPN, intranet, security, IP telephony

## Application Categories

The nine e-business application categories described here are the ones most often implemented by small-medium businesses. These applications are used to improve internal and external communications, to extend brand awareness, to sell products online, to improve business process efficiencies, to boost workforce productivity, and more. Depending on its business priorities, a company will adopt

some or all of these applications. There is no “right” mix and no “right” order of adopting them that can be generalized across all small-medium businesses. Each company must assess its business needs and invest in the applications and enabling technologies that are right for its own situation.

- **Customer care**—When businesses interact with customers, the more touch points (website, letters, e-mail, phone calls, sales calls, service visits, and so on), the better. Customer care e-business systems allow small-medium businesses to integrate communications and service channels into a cohesive knowledge base that can be tapped for more responsive, personalized, and profitable relationships. Because the cost of acquiring new customers greatly exceeds the cost of retaining existing customers, businesses should focus their resources on aggressively targeting and retaining their most attractive customers and on expanding their base of profitable customers. One of the best ways to achieve this is to implement a customer care system. This is the combination of hardware, software, and Internet capabilities needed to gather, manage, and share customer intelligence that can be used to create and deliver web-based marketing, sales, and customer service programs.
- **Web marketing**—Online direct marketing provides a channel for companies to expand their market reach, extend brand recognition, and contact customers with personalized messages. It can include promotional opt-in e-mailing (already used by more than 15 percent of small businesses and 35 percent of medium businesses), online advertising (banners placed on websites that targeted customers are likely to visit), electronic newsletters, and web-based loyalty programs. Web marketing is being used by an increasing number of small-medium businesses to integrate their traditional operations with online tools and services. They use it because it provides a flexible, customizable, and cost-effective means to reach and engage customers.
- **E-commerce**—Transactions can be performed anywhere along the continuum, from the display of a simple, static website (essentially an online brochure) to a fully interactive web-based ordering and e-marketplace portal for customers, agents, and trading partners (for online buying and selling). At the more sophisticated end of its spectrum, e-commerce allows companies to build one-on-one relationships with

customers and to provide promotions and service features that are personalized to specific customers' purchase and product preference patterns. e-commerce can be employed to reduce sales costs, increase customer and market reach, boost revenues, improve inventory management, build stronger branding, and stimulate operational efficiencies for economic and competitive advantage.

- **Web communications**—Employees are as likely to receive an e-mail as a phone call to conduct business nowadays. Text-oriented e-mail is the most obvious form of web communication that companies can employ, but it is by no means the only one. Increasingly popular are multimedia e-mails (containing graphics and other streaming media), instant messaging, web-based videoconferencing, web-based fax (called fax over IP [FoIP]), and unified messaging capabilities that integrate data, voice, and video communications. Web-based communications are immediate and personal, they aid collaborative work processes, they have unlimited reach, and they can reduce travel costs. The information that is exchanged can be timely and rich in content as long as the network carrying the web exchanges is equipped with the performance characteristics to support such content at high speeds.
- **Web-based electronic procurement**—E-procurement, either through individual suppliers or online marketplaces and exchanges, gives employees access to approved materials and supplies, along with buying authority (up to preset thresholds). Product selections and payment terms are predetermined by the Purchasing Department. Distributed procurement gives all employees, but especially those at branch offices or remote sites, more flexibility to get what they need fast. It also allows Purchasing to focus on bigger issues, such as finding the best sources and prices for the goods that make the business thrive.

Additionally, e-procurement streamlines negotiation and contracting processes, automates purchasing for improved order fulfillment accuracy, and improves transaction reporting and tracking. It increases efficiency and speed by eliminating redundant tasks (improving productivity), helps manage suppliers, improves information flows, reduces paperwork, and lowers the overall cost of the purchasing process. With an e-procurement system in place, companies can locate suppliers



with the best prices and quality and increase their buying power by qualifying for volume discounts when purchases are made through preferred vendors.

- **Financial management**—Finance departments produce the data that measures a company's financial health. The financial data guides the company's decisions about new opportunities and the strengthening of weaknesses. Some of the key roles of financial management are to monitor the business's financial performance, prepare forecasts and budgets, maintain records, oversee accounting and governance procedures, and ensure that there is enough cash to meet both current obligations and emerging prospects. It is critical that the Finance Department be able to provide decision-makers with current information. Business leaders and managers use this information to make decisions on the company's strategies, expansion or reduction plans, and so on. With web-based financial management systems and processes, companies can streamline needed management processes, provide real-time financial information (general ledger, fixed assets, accounts payable, accounts receivable, tax accounting, and so on), improve revenue management, and reduce administrative costs.
- **Workforce optimization**—A wide range of human resources functions can be moved onto the network to improve employee productivity, satisfaction, and retention. Workforce optimization systems let employees focus more on the core value and strategic aspects of their jobs and less on routine administrative processes. Typical systems are of two types: communications based (composed of news from management and other company reference information) and transaction based (mostly forms that employees complete and submit online rather than on paper). By using these systems, employees can view and modify benefits or payroll information, open requisitions to hire or reassign staff, create career development road maps, participate in training, submit expense reports, book travel, request and track vacation time, review company policies, check the employee directory, and so on. Self-service tools such as these help employees gather information easily and let them manage transactions on the web for faster responsiveness and improved productivity.

- **Manufacturing and distribution**—Manufacturing and distribution systems help minimize material and inventory costs, compress planning cycles for new products, and decrease lead times needed to help bring products to market faster. With the proper systems in place, companies can forecast better, improve cycle times, and change management. The impact is that production and delivery schedules can be managed to more closely correspond with changing market and customer needs. With improved communications, supplies can be located more quickly, and production bottlenecks can be identified and resolved efficiently. Internet-connected manufacturing systems also improve raw material control, inventory management, and information flows between production, assembly, subcontracting, and shipping processes.
- **Sales force automation (SFA)**—Sales teams thrive on accurate, up-to-the-minute information about customers, competitors, and company products. Sales force automation systems let salespeople find new prospects, check prices and inventories, place orders, and manage expenses through a single portal that is easily accessible 24/7/365 via PCs or handheld computers. By automating sales efforts, you can efficiently forecast, track, and fulfill orders, analyze sales and competitor trends, manage the sales pipeline, and reach sales representatives whether they are in the office or in the field. Such a system frees salespeople to spend more time on productive selling and less time on sales administration processes.

Implementing e-business systems and their enabling Internet technologies requires that the IT organization and business teams work closely and collaboratively. They must start by being aware of the key e-business applications in which technologies can be used. Analyst data show that 42 percent of companies' revenues have significantly increased as a result of implementing e-business systems. As well, 59 percent of companies surveyed report significant cost savings from their e-business applications and technologies.

## The Business Value of Internet Technologies

Achieving business value with technology is about more than producing a quantifiable return on investment (ROI) for a piece of equipment. Technology-enabled business value encompasses the ability to increase customer satisfaction, stimulate revenue growth, increase profitability, improve workforce productivity, reduce risks, and optimize assets. The extent to which each is weighted, and ultimately achieved, varies from industry to industry and company to company. Generally, productivity improvement is viewed as a vital attribute for near-term small-medium business value creation. Partly that is so because productivity improvement is a means by which decision-makers can tangibly recognize and measure the positive impact of their technology investments on daily operations. Productivity is generally defined to include employee time savings, better overall resource utilization, streamlined efficiency, improved process effectiveness (including higher customer satisfaction), and lower costs.

A computer network infrastructure (or architecture), if properly aligned with a business's goals, can serve as a foundation and enabler for key applications, innovation that contributes to competitive advantage, and sustainable growth. Table 1-2 highlights the business transformation changes that small-medium business leaders can achieve by implementing appropriate Internet technologies (and by coupling them with solid business management). Other business value benefits that Internet technologies help deliver include the following:

- **Convenience**—For enabling self-services
- **Effectiveness**—Such as greater responsiveness to partners, suppliers, and customers
- **Efficiency**—Resulting from less redundancy of roles and data and easier integration across internal structures and functional operations
- **Closer working relationships**—As a result of information flowing easily across the company and to external value chain participants

**Table 1-2** *Value Impact of Internet Technologies on a Business*

<b>Less</b>	<b>More</b>
Reactive	Preemptive
Tactical, activity-focused	Strategic, results-focused
Individual	Collaborative
Discrete	Integrated
Generalized	Personalized
Supply chain-oriented	Supply mesh-oriented
Organizational	Multiorganizational
Formulaic and restrictive	Innovative and enabling
Linear and hierarchical	Flexible
Slow	Real-time, interactive
Centralized	Decentralized
Location-specific	Location irrelevant, virtual, and mobile

By blending business goals and technology strategies for value creation, companies can build shareholder value and respond to organizational needs. Analyst research finds that almost 90 percent of business executives believe that IT investments enable the company's business strategies. What is needed is a formal method to bring business and technical experts and practices together to determine the business value benefits of Internet technologies to the company. That method is the creation of a strategic network plan.

## Strategic Network Planning Considerations

With a strategic network systems plan, a company can significantly improve its chances of getting projects approved and funded. A network plan lets the company consciously and methodically review business and IT goals and combine them. It is the best way to achieve process efficiencies, cost savings, more responsive customer services, better collaboration with trading partners, and, ultimately, enhanced revenues and productivity.

A strategic network systems plan should tie together business objectives with networking technologies for both the short and long term. In other words, it should plainly state how technology can help a company reach its efficiency, productivity, and revenue goals.

## Creating a Strategic Network Plan

At first, drafting a strategic systems plan might sound daunting, but it really is not. The plan can be created in a fairly short document, requiring just a brief time commitment from participants. In turn, it has the potential to deliver tremendous benefits to an organization for many years to come.

These are the steps to follow to get a strategic systems plan started:

**Step 1** Get a copy of the company's strategic business plan to identify its overall business objectives and priorities. If no plan exists, the process of creating the network systems plan will help identify the company's strategic goals.

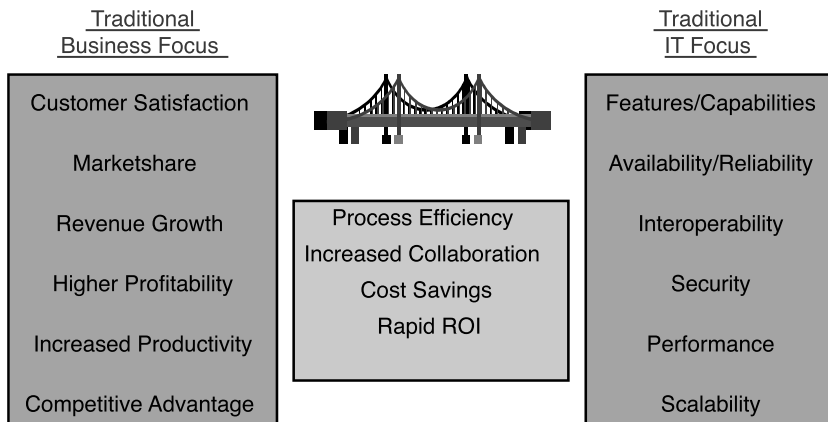
**Step 2** Form a task team made up of business leaders, technical team leaders, and, in some cases, a trusted consultant or other outside advisor. Discuss the company's business priorities for the next 6 months, 12 months, and 18 months (at a minimum). This discussion should focus on what works well in the company, what doesn't, and what should be improved.

**Step 3** Identify the kinds of network systems that support and enable the business issues and priorities just discussed.

**Step 4** Conduct an IT and network audit to understand which business technologies are already in place and how they match the company's goals. It is important to determine the strengths and shortcomings of current systems and their relative importance to the business's objectives.

With these steps, a strategic network systems plan can be devised. This plan should spell out the following:

- **The company's business requirements paired with the corresponding technology (hardware, software, and services) systems that address them**—Analysts claim that more than 80 percent of those who have gone through the Internet technology for e-business application justification and investment process believe their implementation efforts resulted in IT's being more closely aligned with corporate strategy. Figure 1-2 highlights the perspectives that business decision-makers and technical decision-makers bring to the planning process and how they must come together in their thinking.



**Figure 1-2** *Blending Priorities for Business Value Creation*

- **A timeline for investment and deployment that shows how the timeline tracks to the priorities in the overall company business plan**—Not every small-medium business needs every available computer networking technology—at least, not to start. Phasing, based on knowing what can and cannot be accomplished with each technology, should shape the investment plan.

- **A robust network architecture design**—Technology blueprints should be devised that include a network map of where the company is today technically and how the leadership team plans to build the network in an evolutionary way.
- **An anticipated budget**—The budget should include all costs (equipment, services, training, ongoing management, technical support, and so on).
- **Metrics to measure the success of Internet technology and associated investments**—This helps build credibility for future investments.

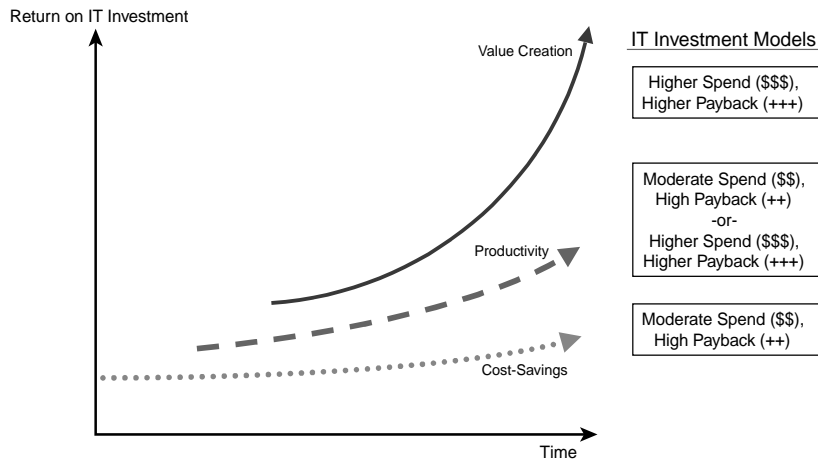
Today, all companies large and small, must justify their IT expenditures for business value. This strategic network plan is essential. It will guide the company's technology acquisitions for years to come, while delivering the greatest functionality and value.

## Justifying Internet Technology Investments

The strategic network plan should serve as a business value framework that helps decision-makers evaluate and justify IT investment options. As part of the planning process, it is important for executive decision-makers to decide if they want to lead or follow IT trends that relate to their industry sector. Doing so will facilitate future justification processes. Small-medium businesses can take more rapid action to approve and adopt Internet technologies as soon as company strategy, technology support linkages, and investment priorities have been spelled out. With those issues resolved, the justification process becomes more focused on how to seize opportunities as they arise, and not how to react to competitors who have taken a market lead. Companies cannot afford to miss very many “first-in wins” opportunities and expect to succeed as a business.

Business investments (including those for Internet technologies) are most effective if they are justified as a part of a portfolio of assets rather than as discrete, independent projects (the traditional IT approach). The goal is to think of IT investments aligning with the company's balance sheet. This involves not only

diversifying the new capital expenditures that are made, but also leveraging existing infrastructure investments to derive their full value. Figure 1-3 suggests three possible buckets for IT portfolio diversification and relative spending and payback objectives within each.



**Figure 1-3** Business Goals and Investment Strategies

## Asking the Right Questions

Deciding whether and how to justify a technology depends on a company's ability to deploy the technology and the potential benefits to be realized from adopting it. Company leaders must become skilled at evaluating and making sound investments in the technologies that will support their corporate strategies. Companies can achieve this by better understanding network technology options and asking questions such as the following:

- Which vertical industry trends or changes will the company address?
- Which e-business processes is the company currently using? Which one(s) is/are planned or under consideration?
- What strategic, operational, or process improvements (including effects on revenues, cost of goods sold, operating expenses, earnings, and so on) are anticipated?



- What are the new investment(s) goals? How important is direct payback?
- Do potential investments represent an innovative way to attract and retain customers?
- What are the risks to the company if an investment fails?
- What are the metrics for success (for example, eliminating redundant systems, expanded market coverage, increased market share, higher customer satisfaction, better resource utilization, improved cost savings or time savings, more on-time deliveries, greater service accuracy, and so on) and how will they be measured?

## Competitive Advantage

Gaining competitive advantage is a key justification factor for enabling a small-medium business with Internet technologies. Building competitive advantage almost always involves technology. A number of elements comprise competitive advantage:

- **Time to market**—Timing is key. Getting and staying ahead of the competition is a must.
- **Customer focus**—All businesses need to be customer-centric. The popular battle cry is, “Hug a customer today!” Companies with successful e-business initiatives tend to be at or near the top of their industry sectors as a result of adopting such systems. Often the way they succeed at customer care is to let customers do more for themselves by providing self-service capabilities to speed up their business interactions.
- **Process improvements**—In some cases, processes might have to be redesigned or rearchitected to get the most out of them in the new e-business environment. A critical consideration for potential Internet technology acquirers is to consider the proposed system’s adaptability to changing environments. When justifying Internet technologies, it is important to ensure that they are modular enough and their implementation capabilities flexible and scalable enough to be adapted as needed to new business models or market conditions throughout the defined payback period.

- **Cost savings**—Successfully taking costs out of current business processes via e-business enablement is another way for IT leaders to create credibility. If the network foundation that is established to support e-business applications and associated technologies flexibly can handle incremental software and hardware upgrades and enhancements, that system will deliver a lower total cost of ownership (TCO) than one that is nominally less expensive at initial purchase but also less flexible in its design.

## Establishing and Maintaining Credibility

Credibility and business technology investments go hand in hand. It is important not only to tie technologies to business value, but also to know when to try to justify technologies using hard, quantifiable dollar figures and when not to. If the numbers presented are forced and inconsequential, the value of the proposed IT investment could lose its credibility (as would the person proposing it). ROI justifications cannot be made for every investment, especially those that address risks and negative impacts to an organization, because they cannot be directly linked to revenue gains. With some investments, it is better to accept that they will deliver soft versus hard benefits and to justify them accordingly.

## To Lease or Not to Lease

A consideration worth weighing relatively early to midway through the justification process is whether to pursue lease financing to help reduce the overall cost of Internet technologies. Leases are usually available in short-term (less than one year payback) and long-term (more than one year payback) options. Technology vendors, value-added resellers (VARs), and financing companies provide a variety of lease types from which to choose. Here are some of the most common lease types:

- **Capital leases**—These work like a loan. Lessees build equity in their technology equipment as they make payments.
- **Operating leases**—These are considered “off the balance sheet.” Monthly payments are expensed as budget items.

- **True leases**—These give lessees the option to purchase their technology equipment, at fair market value, at the end of the lease term.

One of the primary benefits of lease financing to small-medium businesses is that it helps them do the following:

- Manage growth by increasing their purchasing power.
- Prevent technology obsolescence with options for upgrades and equipment swaps possible throughout a lease term.
- Eliminate risk by allowing equipment to be returned at the end of the lease without regard for book value.
- Manage budgets because lease payments are predictable and fixed.

Companies that explore financing options should be prepared to provide lessors with information such as the following:

- Company's legal name and its location
- Credit application
- Several years' worth of financial statements (audited is usually preferred)
- Interim financial statements for the current year
- Company business plan (for newer-stage companies)
- Two to three years of company financial projections (for newer companies)
- Financing proposal

## Monitoring Payback

After Internet technology investments have been justified and systems have been adopted, business leaders should monitor the benefits and payback they achieve with them to establish a track record for future proposals. Analyst research finds that more than 60 percent of IT executives say their companies closely analyze the value of their e-business efforts. In fact, small-medium businesses are more likely to do so than their larger counterparts. That same 60 percent significantly increase company revenues as a result of their e-business investments over a period of several years. And more than 70 percent realize measurable cost savings (costs such as transactions, customer acquisition and retention, non-IT staff, non-IT capital expenditures, travel, and logistics and warehousing).

## Summary

Business decision-makers and technical decision-makers have a lot of choices to make in the running of their business. The one choice that is a given is the need for technology. Technology lets small-medium companies achieve more with fewer resources and to gain momentum in their drive toward sustainable success. By relying on the application of technologies to the integration of the company's systems, processes, organizations, and value chains, businesses assume the moniker of e-business.

Small-medium businesses typically adopt nine categories of e-business applications (customer care, web marketing, e-commerce, and so on). Internet technologies are used to support and enable these applications as a business operations foundation. The overall goal of combining software business applications with Internet and other technologies is to achieve business value. Business value is comprised of customer satisfaction, revenue growth, increased profitability, productivity improvements, lower risk, and asset optimization.

Companies can ensure that they remain focused on achieving desired value metrics by methodically developing a strategic network plan. This plan should be the result of collaborative efforts between a company's business and technical leaders. After they have jointly determined the best technologies to support company plans and objectives, the final essential step they must perform before adoption and implementation is to justify network technologies in business value terms. Knowing when to use hard and soft benefits, and considering creative options such as lease financing, are essential to this process. Growing companies can improve their odds of success by blending management know-how with Internet technologies to achieve desired elements of business value.