

8.0 IT Spending: How Do You Stack Up?

At one time or another, virtually every IT manager has to look at IT spending. In many IS organizations, this self-evaluation must be done annually.

Many consider IT spending levels a proxy for IS organizational efficiency. Although IS efficiency relates to IT spending levels, an IS organization's level of spending alone does not determine efficiency.

Evaluating IT spending levels — within the enterprise and with external peers — represents a valuable exercise. Asset managers often are at the forefront of such discussions.

However, many IT managers misuse the IT spending data they gather. An IT spending peer benchmark can give an IS organization a false sense of security. For example, an enterprise whose IT spending sits at the industry average still may not manage its IT resources well. Enterprises need to recognize that IT spending metrics can be misleading, and may provide a false sense of security to enterprises.

Asset managers must consider issues beyond overall IT spending levels, such as:

- How much of the IT budget is discretionary vs. nondiscretionary
- How much it costs per employee to deliver IT services
- How will cost components within the IT budget change over time

This chapter presents high-level IT spending benchmarks and other metrics designed to help enterprises compare themselves to peers. Asset managers should recognize that:

- The cost-consciousness of 2002 is here to stay
- They can assume a critical role in helping the enterprise meet its cost-saving objectives

This chapter also gives asset and procurement managers a broad context for IT spending. Although some people may not be responsible for the metrics discussed here, they still have to operate within them in their enterprises. The more the asset and procurement management team knows about overall IT spending trends, the more likely it can align its processes with the overall IT and business strategy.

This chapter highlights important IT spending trends, such as how cost will represent a key consideration for all IT investments for the foreseeable future. It also offers guidance on how to best use IT spending data — such as spend what the business strategy dictates, not at the industry average just for the sake of being at the average. The analysis in this chapter is framed by the following Key Issues:

- How are enterprises setting their IT budgets to match the current economic environment?
- How will IT budgets evolve?
- How will IT priorities change in the future?
- How can enterprises determine if they are spending the right amount of money on IT?

8.1 Determining the IT Budget for the Enterprise

Key Issue: How are enterprises setting their IT budgets to match the current economic environment?

8.1.1 Expect the Slowdown in IT Spending to Continue

Strategic Planning Assumption: Through 2006, no industry will see double-digit growth in IT budgets (0.7 probability).

CEOs often worry that IT spending continues to skyrocket. However, after years of steady increases, IT spending has slowed. Across all industries, the average enterprise now spends approximately 4 percent of gross revenue on the IS organization.

Enterprises likely won't spend at past levels (2 percent to 3 percent of gross revenue). They also won't have their IT spending increase indefinitely as a percentage of gross revenue.

In most large enterprises, Gartner believes that IT spending will increase at a rate of 3 percent to 5 percent annually between 2004 and 2006. Through 2006, no industries will see the double-digit IT budget growth of the late 1990s. Between 2004 and 2006, IS organizations will face intense pressure to reduce operational costs and keep spending in line with other shared enterprise services (such as finance and marketing).

The pool of resources for IS organizations is not unlimited. IS managers should not expect their budgets to increase indefinitely (see Figure 8-1). At the same time, hidden or business-unit spending on the IS organization will consume a larger portion of overall IT spending, essentially siphoning more money out of the central IS budget.

Action Items:

- Reduce baseline IS costs
- Implement rigorous processes for making IS investment decisions
- Examine closely the nature of hidden spending in the enterprise

8.1.2 The Business and Economic Climate for IT Spending

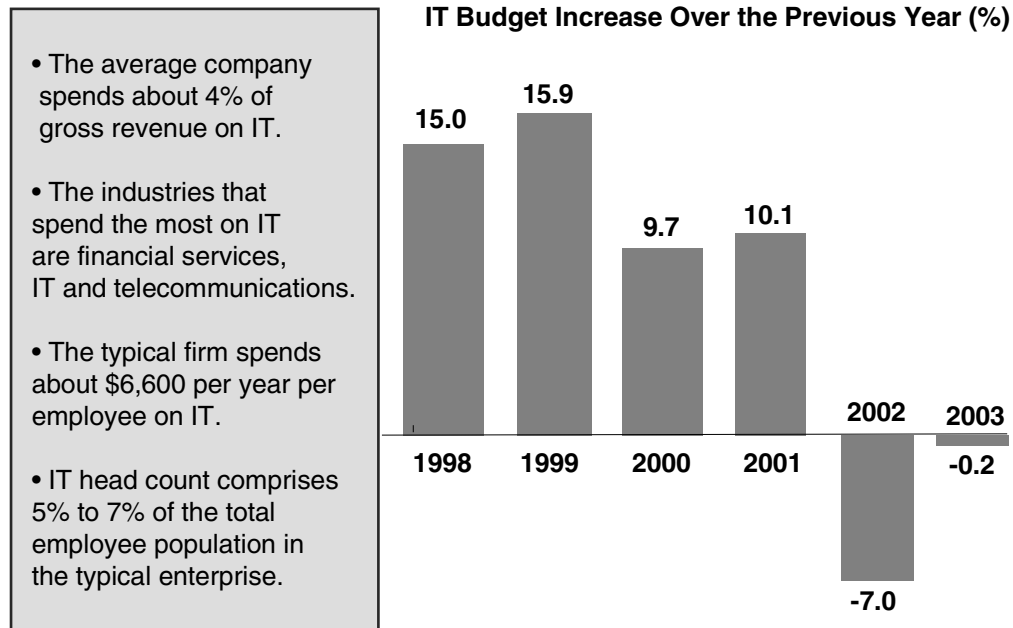
Strategic Planning Assumption: By 2007, top enterprise management will believe that 40 percent of IS organizations provide tangible benefits to the business, up from 25 percent of IS organizations in 2002 (0.7 probability).

Although recent economic hardships forced some enterprises to make sweeping changes in their IT budgets (particularly in sectors such as travel, telecommunications, IT software and IT hardware manufacturing), many enterprises' IT spending levels were set before the recession. This demonstrates the strong commitment that enterprises have to IT, and the high level of confidence that business leaders have in their IT investments.

In 2002, budgets tightened and IT investments faced increased scrutiny. IT purchases most often postponed in 2002 included new capital investments (including PC and other hardware purchases) and new software systems. In many enterprises, new development was postponed, and the IT group retrenched around core processes. Security also came to the forefront, forcing many enterprises to channel funds meant for other projects into IT security.

In the current business climate:

- Enterprises want to leverage their IT investments and only then buy more
- IT baseline costs are significant and rising (they make up about 75 percent of the operating budget)

Figure 8-1: IT Budget Growth Has Stalled

Source: Gartner

- Tight budgets make IT prioritization key
- Many business managers know quite a bit about IT and want to have more control over IT decisions
- The IS organization faces a threat from outsourcing
- Chief financial officers (CFOs) are watching and approving IT purchases
- Many enterprises are finally measuring the business value of IT

Even though IT budgets in 2002 fared better than some expected, IS managers should realize that heavy scrutiny for new IT investments will not fade quickly. In addition, those managers must recognize that top executives have virtually no tolerance for slack in the IT budget. Furthermore, although the overall economy shows some signs of improvement, the technology sector will likely need more time to recover.

Action Item: IS organizations should secure their long-term future if they can:

- Demonstrate financial credibility to the business
- Leverage current IT investments

- Deliver and demonstrate maximum return (and value) for IT investments

8.1.3 Measuring IT Investments

Strategic Planning Assumption: Through 2005, enterprises will struggle to realize the intended benefits of strategic projects because 35 percent of them will begin without predefined, compelling business cases (0.8 probability).

Spending levels give IS organizations little insight into their overall effectiveness. IS organizations must understand the distinction between business benefits and the cost of IT benefits.

Metrics should be linked to stated business objectives. Commonly used business metrics include (see Figure 8-2):

- *Net present value (NPV)* evaluates initiatives that may result in a series of measurable benefits or costs extending for three or more years into the future — but does not take risk into account.

- *Return on investment (ROI) and return on assets (ROA)* calculate a profit or loss resulting from an investment.
- *Economic value add (EVA)* measures increase or decrease in shareholders' wealth; it can demonstrate how everything has been done in cutting costs while capital efficiency has been ignored, forcing attention on capital employed and excess working capital.
- *Earnings per share (EPS)* is the amount of profit earned per share.
- *Margins* compute the difference between selling price and cost of goods sold, and can be used to compare against industry best practices.
- *Cash flow* represents the cash generated and used during a period, and indicates financial strength.
- *Market share* — which shows past performance and does not predict future results — indicates the

percentage of a whole market for a good or service that an enterprise, line of business or product possesses.

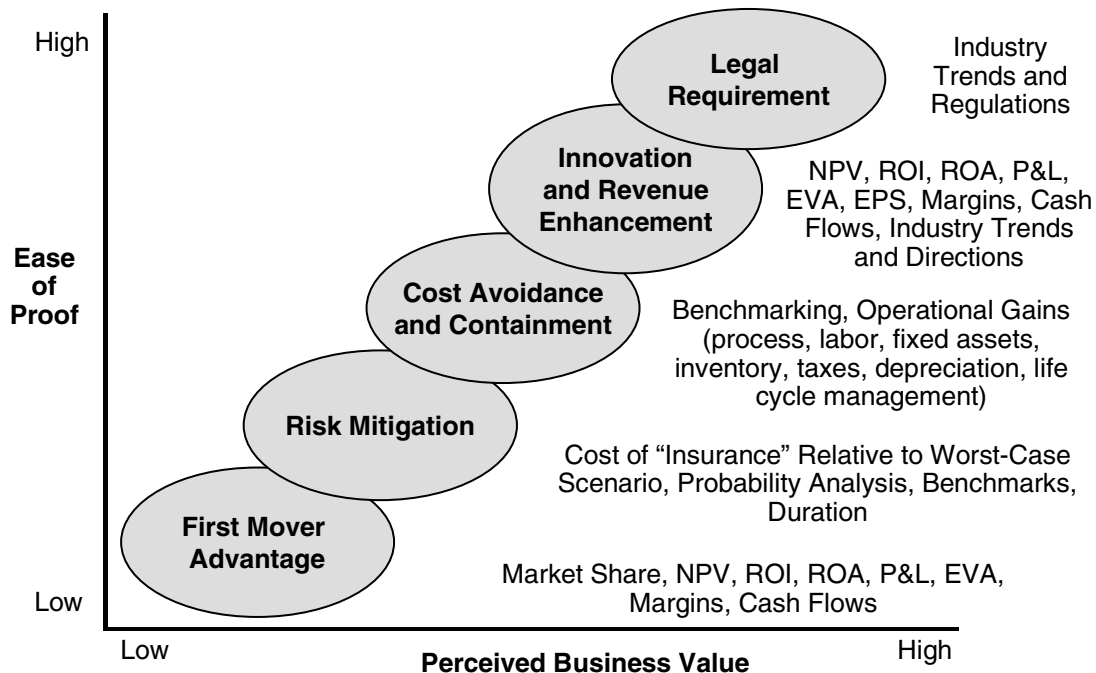
- *Internal rate of return (IRR)* compares interest rate to risk-adjusted rate of return, which makes it a good way to compare unlike investments.

Action Item: Don't oversell IT investments. Rather, openly discuss the risks associated with IT investments and what the IS organization and business can do to mitigate them.

8.2 Changes and Trends in IT Spending

Key Issue: How will IT budgets evolve?

Figure 8-2: Five Methods for Justifying IT Investments



- EPS** earnings per share
- EVA** economic value add
- NPV** net present value
- P&L** profit and loss
- ROA** return on assets
- ROI** return on investment

Source: Gartner

8.2.1 Understanding Industry Spending Trends

Tactical Guideline: 75 percent of IT-enabled business initiatives cannot be justified by traditional cost-benefit analysis alone.

IT spending comparisons should look at peers from the same industry because IT spending levels vary greatly across industries. Some industries, such as construction, spend just more than 1 percent of their gross revenue on IT, while financial institutions spend close to 7 percent of their gross revenue on IT.

Similarly, volatility in IT spending levels varied significantly by industry during 2002. The hardest hit sector was telecommunications, which cut IT spending an average of 30 percent from 2001 to 2002. Several other industries — including IT, transportation, services, petroleum and insurance — reduced their IT spending by more than 10 percent in 2002 (see Figure 8-3).

Although spending cuts in 2002 happened across the board, enterprises in most industries forecast flat IT spending levels for 2003 (see Figure 8-4).

IT budgets are flat for many reasons. First, many enterprises heavily invested in IT during recent years and now have more IT capacity than their business can use. The failure of the dot-com business model and much-publicized, large-scale IT failures have also made top executives leery about IT investments. But even in the best cases, the global recession and declining revenue have made approval of discretionary investments hard.

Asset and procurement managers can help IS leaders by implementing best practices, thereby assuring the IS organization that it is spending its IT budget wisely.

Action Item: Understand peer spending trends, but do not allow that information to drive IS investment or strategic decisions.

Figure 8-3: Changes in IT Spending by Industry

	% Change 2002	% Change 2003
All Industries	-7.1	-0.2
Distribution/Retail	-4.0	-4.2
Distribution/Wholesale	-14.8	0.1
Financial/Banking	-8.3	4.5
Financial/Insurance	-14.8	3.2
Financial/Credit	-11.3	-8.8
Financial/Securities	-3.2	6.7
Government	14.5	-2.4
Healthcare	-2.0	6.5
Information Technology	-15.6	-17.2
Manufacturing/Discrete	-5.8	-1.3
Manufacturing/Process	3.5	2.3
Petroleum	-14.6	9.8
Services	-20.3	0.0
Telecommunications	-30.3	-2.2
Transportation	-10.0	-2.7
Utilities	-0.8	2.0

Source: Gartner

Figure 8-4: IT Spending Trends by Industry

	IS Operating Budget as a Percentage of Revenue: 2002	IS Operating Budget as a Percentage of Revenue: 2003 (projected)
Process Manufacturing	1.8	1.7
Services	2.3	2.4
Petroleum	2.9	2.5
Transportation	3.8	3.8
Services	3.5	3.5
Utilities	1.9	1.9
IT	7.7	6.4
Insurance	2.6	2.3
Retail	1.4	1.3

Source: Gartner

8.2.2 Benchmarking IT Spending

***Tactical Guideline:** Limiting IT spending because of peer comparisons can impede business growth. When it comes to IT spending, enterprises should spend what the business strategy dictates.*

Some IS organizations prefer to look only at the IT operating budget for benchmarking purposes. That provides a simpler method to compare ongoing costs. The perception of an enterprise's health is then based on having a lower level of IT spending than competitors — the efficiency view of IT spending.

Many enterprise leaders view IT spending levels higher than industry norms as a potential source of competitive advantage — the effectiveness view of IT spending. Even in tight economic times, most enterprises realize that falling behind in IT spending creates significant business risks, particularly in industries in which participants rely on technology to distinguish themselves from their competitors.

When recent economic conditions were stronger, many IT-enabled competitors sought to outspend their competitors. One of their aims was to force competitors with fewer resources to weaken themselves by keeping up with the higher levels of IT spending. Although few

use that tactic in today's economic environment, smart enterprises have cut IT spending levels while preserving the maximum amount of IT investments designed to help grow the business.

Action Item: IS organizations should select appropriate metrics and employ a process to regularly update information to illustrate trends and changes. Acceptable ranges must be established to provide guidance for when to alert senior management.

8.2.3 Survey of IT Spending Expectations in the First Half of 2003

***Tactical Guideline:** IT budgeting no longer occurs only annually. Expect that spending levels will be adjusted quarterly or even monthly.*

Although IT buyers indicate that they are ready to spend more, they show no signs of it. Toward the end of 2002, buyers (on average) reported spending only slightly less than planned amounts in the fourth quarter. However, the increased optimism for future spending plans that buyers showed throughout most of 2002 has faded without producing a marked increase in IT spending outlays.

Figure 8-5 shows the data series for a two-year period of decline and recovery in IT spending. The separate lines in the graph represent respondents' IT spending authority. The figure summarizes responses to whether respondents expected their IT spending for the first half of 2003 to be more than planned, less than planned or about the same as planned.

The data points come from the percentage of respondents who responded "more than planned" minus the percentage of respondents who responded "less than planned." Responses of "about the same as planned" were omitted for simplification. On average, respondents said that their IT outlays in the fourth quarter of 2002 were slightly less than planned levels, and that their spending for the first half of 2003 would be slightly more than planned.

Action Item: Long-held beliefs about IT budgets no longer hold. Have contingency plans for unexpected pullbacks in spending.

8.2.4 Breaking Down the IT Budget

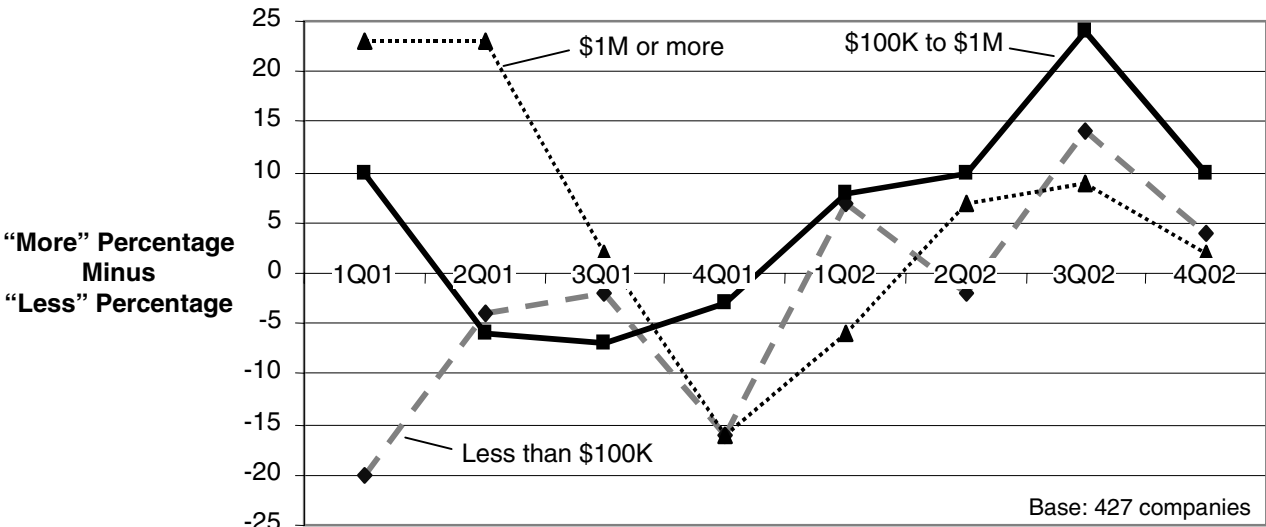
Tactical Guideline: Implement activity-based costing techniques that track the cost of delivery for discrete IS services, such as help desk services.

Achieving a better IS "bottom line" starts with understanding where the IS budget is being spent. In a typical IS organization, about 22 percent of IT spending stems from the purchase of capital goods and services. Those expenses usually are new purchases and can be easily controlled (for example, postponing the rollout of new PCs, or delaying the implementation of a new software module).

Respondents to Gartner's annual IT Staffing and Spending Survey report that hidden or business-unit IT spending comprises about 8 percent of all IT spending (see Figure 8-6). Largely outside the control of the IS organization, this hidden spending is likely much higher — probably closer to 25 percent of total IT spending.

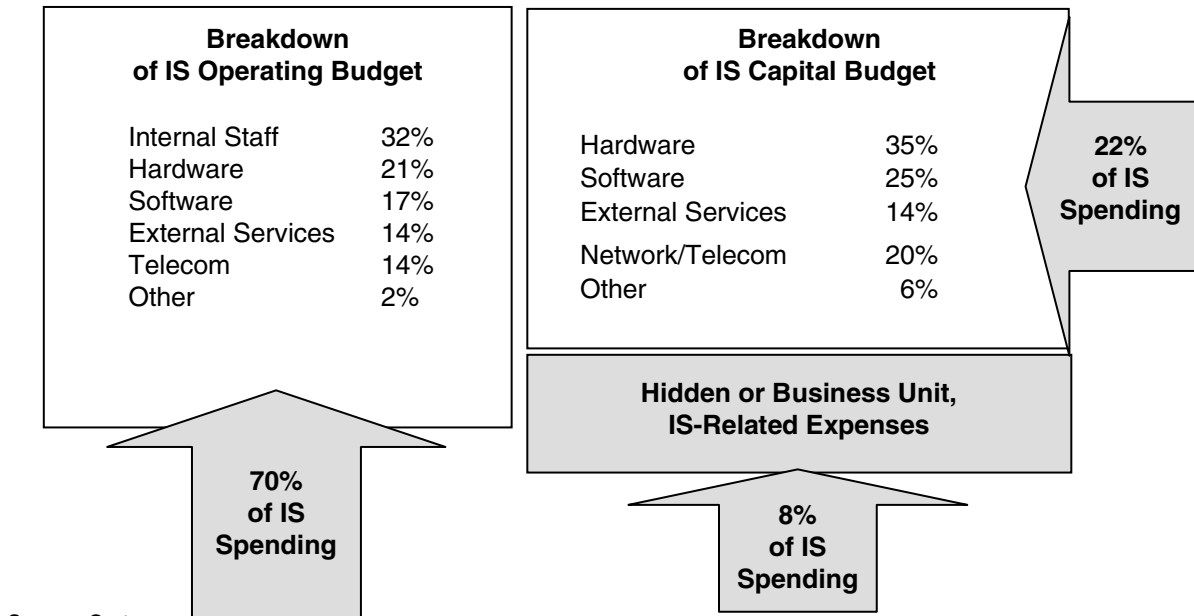
The IS operating budget, primarily staff costs and ongoing costs associated with maintaining IS systems, represents the largest portion of IT spending — about 70 percent of overall IT spending in the typical enterprise. Although the largest piece of IT spending, the IS operating budget is also the most difficult to trim. IS operating budget cuts typically result from workforce reductions, reducing service levels or implementing a series of cost-cutting measures to trim operational costs (for example, renegotiating maintenance contracts).

Figure 8-5: Survey of Expectations for IT Spending for the First Half of 2003



Source: Gartner
 \$100K \$100,000
 \$1M \$1 million

Figure 8-6: Breaking Down IT Spending



Action Item: Employ a mixture of short-term and long-term IS cost controls that will affect the IS capital budget and the IS operating budget.

8.3 Successfully Setting IT Spending Priorities

Key Issue: How will IT priorities change in the future?

8.3.1 Recent IT Spending Priorities

Tactical Guideline: Prepare contingency plans for unexpected IS budget cuts.

Although most enterprises grew increasingly conservative about IT spending in 2002 and 2003, growth areas still exist in the IT sector (see Figure 8-7):

- Security continues to be near the top of the list for most IT managers. Evidence indicates that enterprises are spending on security initiatives.
- Storage and storage-area networks are considered by IS executives as areas of high importance.

- Application integration and Web-enabling of installed IT systems ranks as a high priority among IT managers.

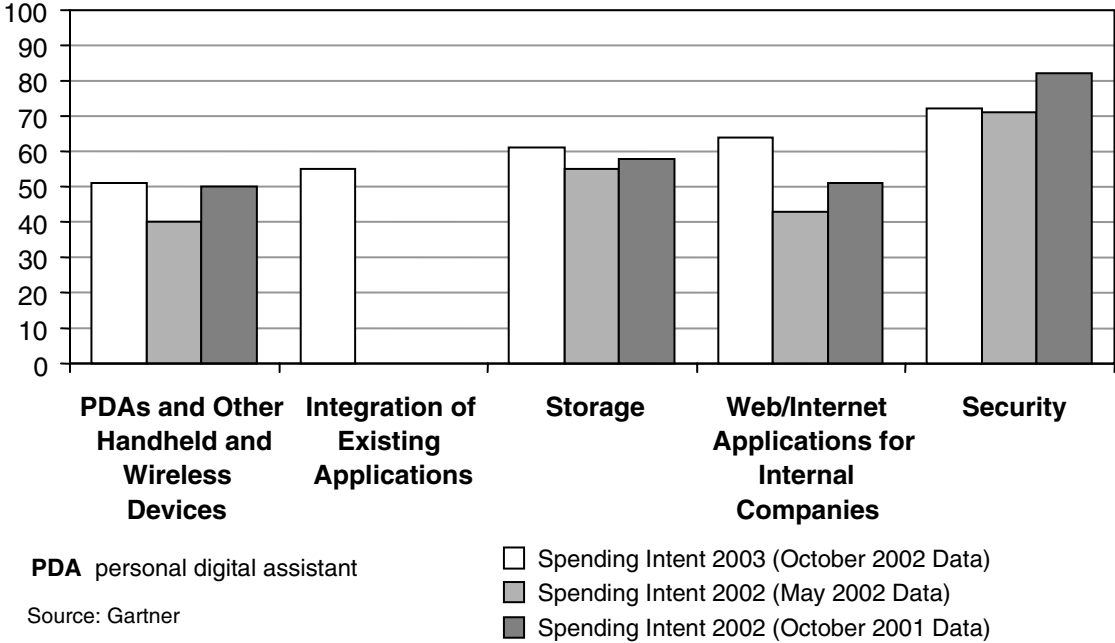
Despite these pockets of high-priority technologies, many senior executives strongly believe that enterprises should be leveraging their installed technologies, rather than buying more IT.

Interest in IT outsourcing in general — and offshore outsourcing in particular — also continues to grow. When the economy got worse, many CFOs looked at selective outsourcing as a way to trim costs. That trend will continue, as many enterprises find the economics of offshore IT outsourcing too compelling to pass up.

Interestingly, the top technology priorities of recent years focused on leveraging and enhancing in-place systems. That will remain the case until the IT sector produces important, new, must-have technologies (for example, the introduction of the desktop PC in the 1980s, and business and consumer use of the Internet in the 1990s) — sometimes referred to as “the next big thing.”

Action Item: Focus IT initiatives on architecture, application integration and other efforts that will allow the enterprise to achieve maximum leverage.

Figure 8-7: Top IT Spending Priorities, 2001 to 2003



8.3.2 Evaluating the IT Baseline

Tactical Guideline: Reduce IT maintenance costs by 3 percent year-over-year and increase discretionary IT spending as much as possible.

All enterprises can gauge their IT investment health by evaluating the IT baseline, which represents the percentage of IT spending allocated to operational expenses (vs. the percentage of IT spending allocated to enhancements). An enterprise needs a constant and steady new development and application overhauls (such as enhancements) to keep itself healthy and competitive — increasingly so as IT drives business value. In general, enterprises that allow their IT baseline spending to creep above 80 percent run the risk of underinvesting in their IT futures, which inhibits enterprise performance and dilutes competitive advantage (see Figure 8-8).

New development projects and major enhancements have costs that extend beyond the application or system created. For every dollar devoted to new functionality, Gartner estimates that the typical enterprise will pay 40 cents to 60 cents every year thereafter to maintain the new system for its useful life. For example, those with recently refreshed business processes due to enterprise

resource planning (ERP) implementations know this reality well.

In addition, the ongoing funding commitment for e-business initiatives will be close to 60 cents per year for the useful life of the system. Enterprises in the midst of an e-business transition will show lower baselines (and higher levels of discretionary spending) than industry norms; their IT baseline will be at least 72 percent.

Action Item: To maintain competitiveness, strive to achieve IT baselines of below 80 percent.

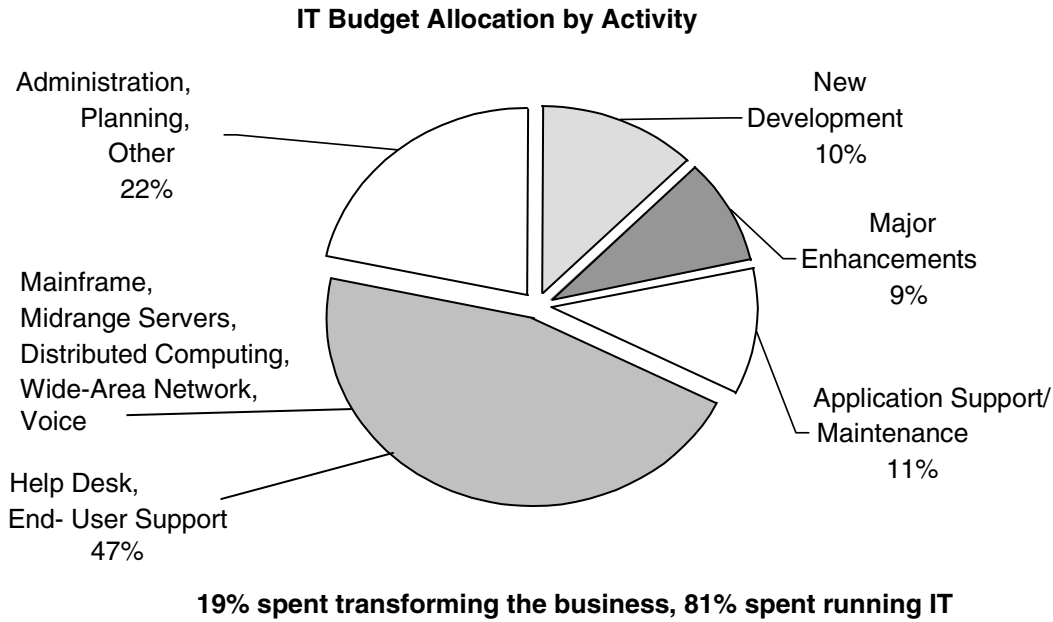
8.3.3 ERP and the IT Budget

Tactical Guideline: The IT budget amount devoted to ERP will decline 10 percent to 15 percent of the IT budget annually.

With seven years of history to aid in a fresh look at ERP IT spending, and the evolution of ERP through the Hype Cycle, a clear message has emerged regarding ERP:

- Many enterprises will not fully exploit e-business without first going through ERP.

Figure 8-8: A Sample IT Baseline Analysis



Source: Gartner

- Full integration of ERP takes up to five years for large enterprises.
- Version upgrades for ERP packages will consume 10 percent to 20 percent of the IT budget.
- As a percentage of ERP IT spending, implementation costs are decreasing and ongoing costs are increasing.
- ERP by itself will not double an IT budget. However, IT consolidation, business process re-engineering and infrastructure upgrades associated with ERP — and often necessary for its success — will move budgets toward 100 percent increases in many industries.

As ERP matures, Type C enterprises reap the benefits of the underestimation mistakes made by Type A and Type B enterprises. Underestimating time, money and staffing necessary for program completion has declined significantly from 100 percent to 25 percent to 33 percent. Much of this improvement stems from lower expectations of the benefits of ERP. Although ERP can transform an enterprise, rigorous business process re-engineering is necessary to fully exploit ERP innovation.

The following lists a sample of industries in which ERP represents a high percentage of the IT budget:

- Wholesale distribution — 42 percent
- Discrete manufacturing — 25 percent
- Process manufacturing — 28 percent
- Petroleum — 28 percent
- Banking — 20 percent
- Healthcare — 22 percent
- Construction — 30 percent

Action Item: When considering the total cost of ownership of ERP systems, plan to spend 40 percent to 60 percent of the initial implementation costs on maintenance for an ERP system for every year that it is in full production. Those costs include labor, hardware and software.

8.4 Better Planning for IT Spending

Key Issue: How can enterprises determine if they are spending the right amount of money on IT?

8.4.1 Measuring IS Organization Effectiveness

Tactical Guideline: As users begin using more than one PC device, IS managers must track IT budget per user and per device.

The number of employees supported by one IT workforce person (regardless of his or her role in the IS organization) often measures IS organization effectiveness. This number tends to be lower than industry standards for effective enterprises and higher for efficient enterprises. A formal benchmarking exercise — in which complexity, business process, service levels and costs are normalized for proper comparison — best measures this ratio.

Collecting accurate information can prove challenging because IT outsourcers, contractors and consultants are expected to be included in the total IT head count calculation. Heavily outsourced environments can make it difficult to determine an accurate view of the total IT head count.

The way in which employees use IT will affect the level, as well as the cost, of the support required. In general, the higher the percentage of back-office staff, the lower the cost per employee. The higher the front office and other staff, the higher the cost per employee. The business processes supported will determine the percentages. Although understanding employee needs will likely improve the effectiveness of IT services, that action will not often result in lower costs per employee.

Action Item: Since 2000, the ability to compare the IT budget per employee has changed because many employees have two or more PC devices. Track the number of employees and the number of devices supported to accurately measure the total cost of IT services.

8.4.2 Externally Sourcing IT Services

Strategic Planning Assumptions:

- By 2006, the percentage of enterprise workforce staff in North America and Europe devoted to IT will reach 8 percent (0.7 probability).
- By 2006, the percentage of enterprise workforce staff in IT-driven industries will be between 15 percent and 20 percent (0.7 probability).

Some heavy users of external service providers (ESPs) have faced a backlash regarding the extent to which external sourcing will continue. Whether due to a correction of expectations, a genuine discrepancy with results or the need to find a scapegoat, many enterprises are more selectively using ESPs and discussing the best course for insourcing selected IT services.

Overall, the trend toward external sourcing will continue, and issues related to ESP procurement, contract negotiation and management will continue to grow in most enterprises. However, once outsourced, services that reside outside the IS organization will face increased oversight and continuous accountability.

The right mix of internal and external workforce will differ among enterprises. On a service-level basis for typical IT services, an efficient IS organization will cost at least 20 percent less than an outsourced price (except for commodity IT services). However, price often represents a secondary consideration for external sourcing. In most enterprises, issues such as enterprise strategic importance and IS organization core competencies carry more weight in sourcing decisions.

The following factors will ensure the continued movement of IS staff externally:

- Outsourcing business processes
- The emergence of application service providers
- The transition of the IS and shared service organizations from being only service providers to being service coordinators

Action Item: IS organizations that anticipate an increase in external workforce should also plan to increase the internal workforce to coordinate the activities of the external workforce.

8.4.3 Reducing Costs in the IS Organization

Strategic Planning Assumption: Through 2006, enterprises will not be capable of reducing total wide-area network, voice and data costs by more than 45 percent without adversely affecting service levels (0.9 probability).

Strategic Imperative: The following actions can eliminate up to 45 percent of telecommunications costs:

- Negotiating better prices
- Aligning services levels with needs
- Eliminating wasteful use
- Rightsizing the infrastructure
- Restraining bandwidth growth

Telecommunications continues to be an easy way for enterprises to trim IT costs. With telecommunications services often spread throughout the enterprise and supplied by multiple vendors, telecommunications costs tend to creep. Telecommunications provides a good example, therefore, of how an enterprise can squeeze money from its IT budget.

An asset manager should first break down the telecommunications budget for the enterprise, and compare that to the telecommunications budget of a typical enterprise (see Figure 8-9). This kind of comparison can reveal potential areas of cost savings.

Gartner believes that the typical enterprise can save up to 45 percent of its telecommunications costs by negotiating better pricing, aligning services levels with needs, eliminating wasteful use, rightsizing the infrastructure and restraining bandwidth growth (see Figure 8-10).

The asset management team cannot affect this kind of change on its own. To accomplish this, asset managers must work with telecommunication managers and others in the IT organization to ensure that costs are reduced.

Figure 8-9: Network and Telecommunications Operating Budget Distribution by Category

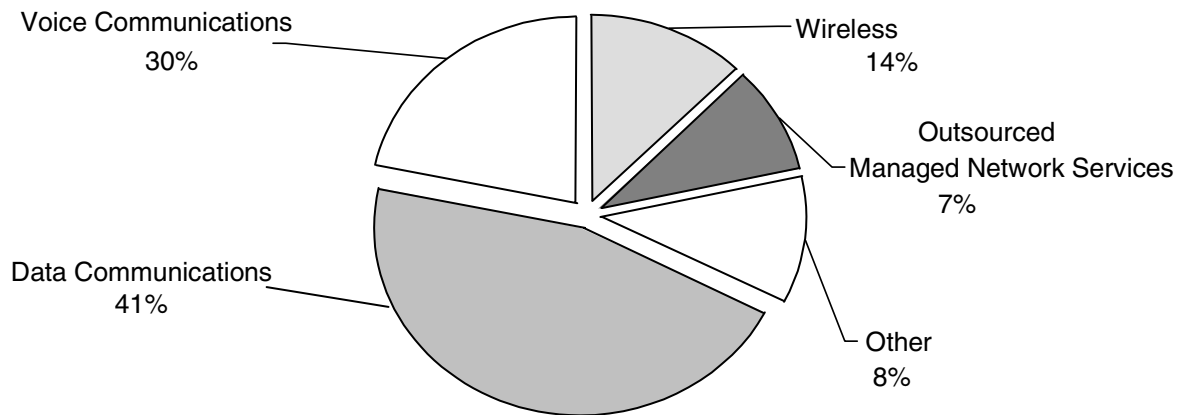
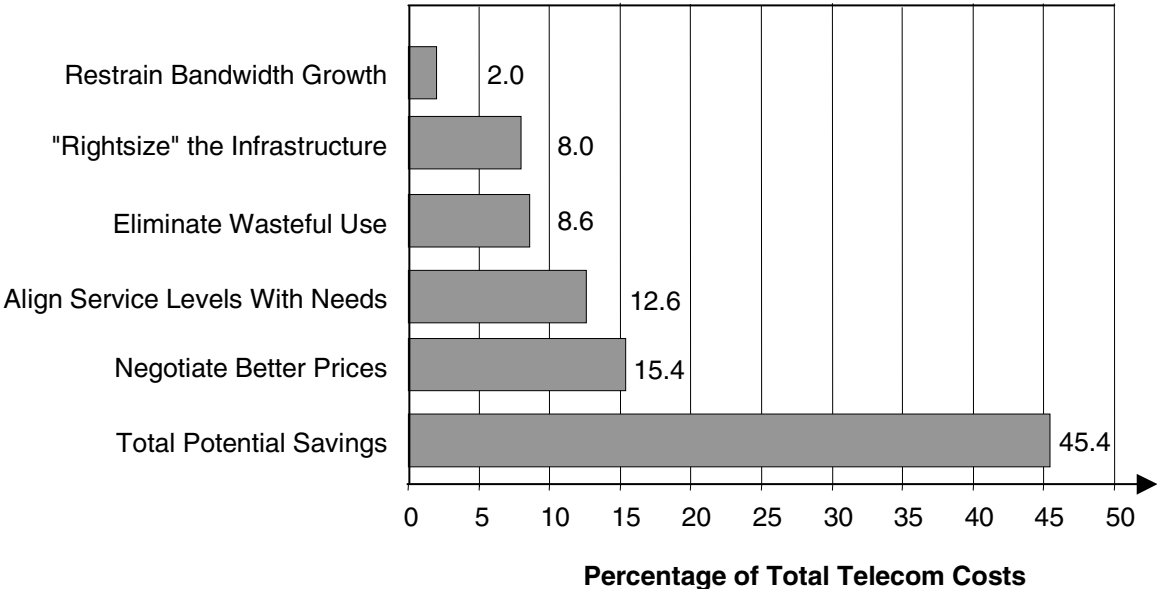


Figure 8-10: Gartner Estimates of Maximum Potential Savings From a Telecommunications Budget



Source: Gartner

Action Item: Prepare to participate in a cross-functional team that is charged with uncovering potential cost savings across the IS organization.

- Duplication of processes
- Misalignment of service levels with enterprise needs

8.4.4 Lessons Learned From 2002

Strategic Imperative: Enterprises must focus asset management efforts on collectively implementing process, people and technology improvements to achieve optimal total cost of ownership, service levels and asset utilization.

Action Item: Do not track expenses only from a “general ledger” standpoint. Also look at the discrete activities within the IS organization and determine the relative costs associated with them.

IT spending and budgeting in 2002 showed one major fact: considerable slack existed in the IT budgets of many IS organizations.

8.5 Recommendations

Although the root cause of spending inefficiency varies, it can include:

- Poor procurement techniques
- Poor asset management
- Redundancy of systems

- Be cost-conscious but do not underinvest in IT.
- Continue to drive down baseline costs so they account for 80 percent or less of the IT budget. Reinvest money saved in growing the business with IT.
- Use enterprise life-cycle analysis, technology adoption profiles and peer benchmarks to better plan for shifts in IT spending.
- When it comes to IT, spend what the business strategy dictates.