

WAPITI LLC

MOVING TOWARD STRATEGIC SPENDING

HOW TO TURN THE IT MONEY PIT INTO A BUSINESS ADVANTAGE



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Nearly every pundit continues to state that the turnaround in IT spending is just around the corner. Unfortunately, for sellers of technology, that corner seems to be unreachable. The prolonged downturn in technology has been attributed to a wide variety of factors: an economic slowdown, over-saturated markets, excessive inventories as well as a loss of confidence in corporate technology.

Smart companies, however, have a different take on the situation. They understand that they can spend less and get more from IT. They can turn what has been called a “money pit” into a business advantage. To make such a change, companies need to understand what they have, build a framework to make decisions, and, finally, leverage an optimized asset base into additional value for the corporation. Consider the following:

- FedEx stated that it won't increase IT budgets until 2007.
- Motorola conducted a systems inventory which resulted in a hardware reduction worth more than \$100 million.
- Operational efficiency is becoming more important for CIOs. MCI is in the process of cutting its IT operational budget by 40 percent.
- Simple, less expensive and complex solutions are being favored over more complex ones. The risk is being transferred from buyers to sellers.
- Asset management techniques and tools are becoming increasingly popular.
- Pay-as-you-go licensing models are becoming more prevalent.

All of these trends point to a new era in IT spending for the next decade. In the past, a technology change forced many companies to accelerate new purchases. Today, a business model change and discontinuity in corporate technology spending will accelerate the move to intelligent asset management and IT governance.

STEPPING BACK FROM A LEGACY OF SPENDING

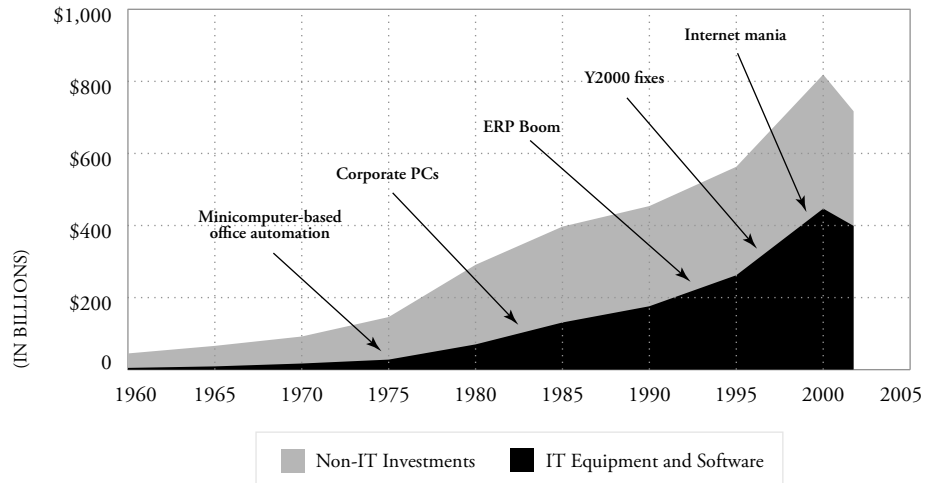
Since the early 1960s, corporate IT spending has steadily accelerated (see figure). In the early days of computing, a series of slow-to-evolve technological innovations (and business benefits) led companies to spend more on technology. Each new technology boosted spending higher.

- Minicomputers in the 1970s
- PCs in the 1980s
- Client-server technology combined with enterprise resources planning (ERP) in the early-to-mid 1990s
- Y2K fixes in the mid-1990s
- The Internet at the end of the 1990s

In the last few years, however, these technology and application platforms have become so competitive that one may completely replace another. In fact, most corporations are hesitant to discontinue older business solutions because they still work. As a result, we find ourselves in an era of redundancy and overlap.

IT Capital Investment Soared Between 1960 and 2002

A set of accelerators over the past 30 years has increased the total rate of IT spending. As software spending became dominant in the 1990s, the rates of increase spiked even faster.



SOURCE: BUREAU OF ECONOMIC ANALYSIS, WAPITI LLC

Corporations have started to accumulate computer systems the way some farmers accumulate old trucks, tractors and cars. Each is good for only one or two tasks, but all have to be maintained. These decades of spending left most corporations with a little of everything. And though some attempted to winnow down their asset base, most found it easier to keep this every growing array of technologies.

GROWING LEGACY, GROWING PROBLEMS

But this growing legacy was not like some tractor in a field. It was an asset that had to be maintained, integrated and paid for. Indeed, anywhere from 60 to 85 percent of IT operational budgets today are spent merely maintaining the existing base of technology without any regard or relation to how or what it is being used for.

A 2001 study by the Boston Consulting Group illustrated how bad the situation had become. It stated, “Last year the top 20 clients of the Boston Consulting Group devoted an average of \$800 million to IT, or five to eight percent of their total expenditures . . . [M]uch is wasted as a result of several critical dysfunctions that plague IT organization and management of most companies.”

These dysfunctions manifested themselves in two ways:

- 1) Purchasing more software technology than needed (shelfware).
- 2) Purchasing more hardware technology than needed (overcapacity).

The software problem rose from the expectation that IT needs would continue to expand as they had in the past. As IT budgets grew by double digits during most of the 1990s, most IT managers believed that it was prudent to buy the maximum rather than the minimum amount of software needed. This was due to the desire to minimize the number of times capital requests would be made and to hedge buys with an eye toward increased internal use.

Unfortunately, overbuying is only half of the problem. The fact is that most IT organizations don't understand how much software they use.

- In a 2002 Morgan Stanley survey published in CIO Magazine, one-third of 300 CIOs surveyed said they had unused database licenses, 12 percent had unused CRM licenses, 20 percent had unused ERP licenses and 10 percent had unused SCM licenses.
- A 2003 Gartner survey revealed that more than 40 percent of the CRM licenses bought by businesses go unused.
- In a 2001 poll by AMR Research, 85 percent of all buyers of SCM software reported that only one or two modules were being used effectively.

The real numbers for software utilization, however, are often much lower than these as most companies have poor visibility of how much software they have and how much is being used. This has the effect of pushing initial spending higher than it needs to be, and also keeps ongoing spending artificially high as well.

The same holds true for hardware purchases. The increased use of distributed servers for Web and departmental applications has created a large and unruly mass of Intel- and Unix- based processors within organizations. When asked, few IT groups can quantify the technical and financial status of their hardware assets. This leads to the following challenges:

- Companies have more technology than they think they have.
- Companies are using equipment that has been written off and targeted for disposal.
- Companies are using equipment that are not supported under current maintenance contracts.

These software and hardware inventory issues place companies at both financial and technical risk. However, this doesn't have to be the case. When companies begin to understand where their assets reside, the savings can be large.

For instance, one company discovered that it had more than 75 separate NT servers in a facility running a wide variety of applications on a wide variety of versions of NT. After this identification, it was able to consolidate its applications on three NT servers. This saved hardware costs, leasing and maintenance charges, and labor costs due to managing fewer systems.

MOTOROLA GAINS IT VISIBILITY AND SAVINGS

In the late 1990s, Motorola was like many major companies: It spent a great deal of money on IT without a good idea how much was being spent and where. To fix this, the company started two complimentary programs: “Fusion” and “Alliance.” Fusion was an initiative to consolidate and optimize its use of hardware. Alliance did the same for software.

According to Toby Redshaw, corporate vice president for IT, “[In the early 2000s,] each business was doing their own thing and buying whatever they wanted... When we finally looked at what we created, we had more than 150 data centers of varying sizes around the world.”

Motorola put together a team to count and measure the systems that were in place. By the end of 2002, Motorola was able to reduce its spending in hardware by more than \$100 million, not counting reductions in yearly maintenance contracts.

SIGNIFICANT SAVINGS POSSIBLE

Motorola’s ability is not unique. Many other companies have started to apply advanced systems management methods and tools to help them actively manage down their cost of information technology.

Current IT Trends Will Decrease Budgets

Depending upon their spending profile, companies will be able to cut between 10 and 60 percent of their costs in different IT spending areas over a period of years. Key to these cuts is the ability to understand and optimize current hardware and software assets

Technology	Factors Driving Costs Down	Potential Savings to IT Budget
<i>Hardware</i>	Microsoft, Linux, Intel-based processors, consolidation, increased utilization, better partitioning	10 to 40 percent
<i>Software</i>	Open source, Microsoft, subscription-based pricing, increased competition, build internally, renegotiate licenses based on use	20 to 35 percent
<i>Labor/ Internal Costs</i>	Supply of technologists, offshoring, automating technologies (e.g. voice recognition).	30 to 50 percent
<i>Services</i>	Offshoring, strategic sourcing	30 to 50 percent

SOURCE: WAPITI LLC

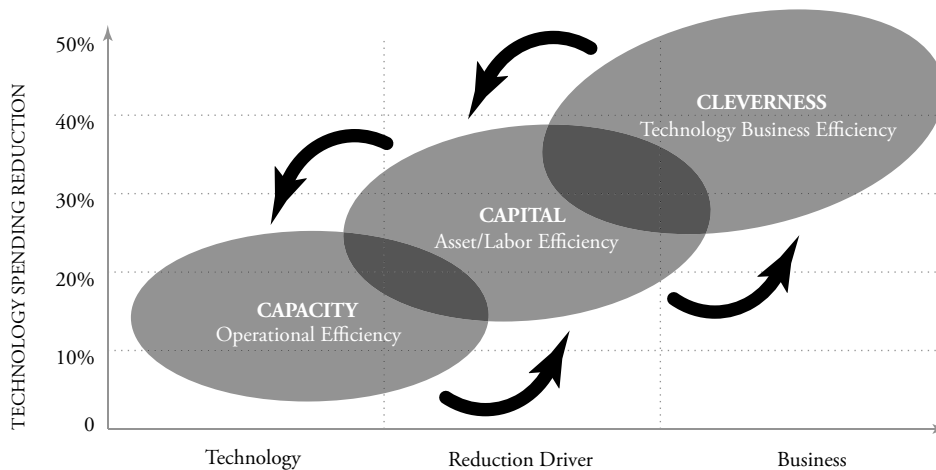
Large savings are possible in each of the four main categories of IT spending (see table.) The savings is a function of the mix of technologies used and how different rationalization, consolidation and redeployment techniques are used. Technologists can use all these factors to reduce the cost of the services they offer. Business units can also look at these factors as a way to encourage IT organizations to monitor their costs. A systematic review of the technologies supported combined with the overall market drivers will help companies understand the magnitude of potential cost reductions.

THE “THREE CS” OF COST CUTTING

Cutting technology costs effectively requires both business and technology groups to examine the impact of the technology on its own and how it is used by business units. Business and technology groups jointly drive the cost-reduction exercise: Technology groups examine hardware, software and service agreements; Business groups examine utilization and payback of a deployed technology.

The Three Cost-Cutting Steps are Iterative

Upon the successful completion of a single step, the next step is attempted. The bottom axis represents the group that dominates the cost-reduction exercise for a given phase.



SOURCE: WAPITI LLC

To obtain the maximum potential cost savings, a three step process should be considered. Each step addresses a different cost area: operational efficiency, asset/labor efficiency and technology business efficiency. In other words, capacity, capital and cleverness:

- **Capacity.** Operational efficiencies are a good place to start when looking for cost reductions. In general, they are not disruptive to companies because effort is placed on doing a better job with existing company resources. IT groups by themselves can focus on operational efficiencies. This effort focuses on determining a technology group’s overall capacity, how it can be better utilized and how to make the appropriate changes.
- **Capital.** The next area of focus is asset/labor efficiency. Rather than explore how much of a given asset (or worker) is used, it examines how much is needed. This need is defined by both technological oriented performance metrics (e.g., how many services does my company really need?) and business metrics (e.g., how many licenses of a particular software products are needed/used?) This cost cutting occurs because technology and business groups agree on which technologies address business needs, what is being spent and how technology is used.
- **Cleverness.** The final area of focus is business efficiency. Technology business efficiency focuses on how clever companies are in their overall use of technology. Companies that attempt to do more with less and understand the benefit that technology delivers will be able to remove that last bit of excess from their IT systems. These groups question all IT investments and their relationship to performance. This last means of cost cutting is lead by business groups that focus on investment return and whether a technology provides a benefit to the corporation.

Consider this example of how the three-step evaluation might work. A company has invested in a sales-force automation system. The operational evaluation looks at capacity and answers such questions as, how many servers are needed? Is the application performing at the necessary level? The IT organization, by itself, can accomplish the evaluation and make improvements.

The next step is to figure how much capital is being invested in the application and its level of efficiency. Business managers in the sales and/or operational groups should examine all areas of spending for sales-force automation and apply it to the way the technology is used. For example, how much is being spent to maintain the application. Are sales groups using the tool? At this stage, companies discover whether their capital investments in sales-force automation are properly aligned with the business goals and actually support those goals.

This takes companies to the third step: determining the technology-business efficiency of the IT investments. This isn't just a simple ROI calculation, but rather a focus on how well the technology is used to achieve business goals. This analysis is driven by business groups with support from technologists. In the case of sales-force automation, the company may find that the installed package taps into a subset of actual capabilities. It may also find that it hasn't realized the benefits initially expected from the application.

This phase determines how clever a company has been in using technology. The issue it explores isn't whether a technology is inherently good or bad, but rather whether its use—or misuse—generates a positive business return. The same technology implemented in different companies can have vastly different results.

Taken together, these steps are iterative and cycle back on each other as part of a continuous process. As each step is successfully completed, the next step should be attempted. If problems arise, the company cycles back to the prior step.

BUSINESS INTELLIGENCE NEEDED FOR ASSET MANAGEMENT

The key to asset management is the deployment of systems management tools and techniques. Systems management software has been in existence nearly as long as computers have been around. This type of software attempts to efficiently match the availability of resources (e.g., hardware processing, network, storage) with the need to ensure good performance and service. Other types of systems management applications assist IT managers in starting up, shutting down and maintaining their equipment efficiently.

Such software has become more important over the past decade as applications and IT resources have become more physically distributed within organizations. This is because for any given type of asset, IT organizations use as little as 10 percent of their inherent capacity. Companies such as Veritas and VMware (acquired by EMC) address such issues for storage utilization and for resource-based hardware utilization, respectively.

But these tools work well only for assets that are visible and understood. Within many organizations, there exists a vast array of IT assets that are unknown and unseen; traditional inventory techniques miss significant pockets of IT assets. Thus, the physical distribution of assets, combined with poor visibility of these assets, has created a need for a new type of systems management technology which is only now emerging.

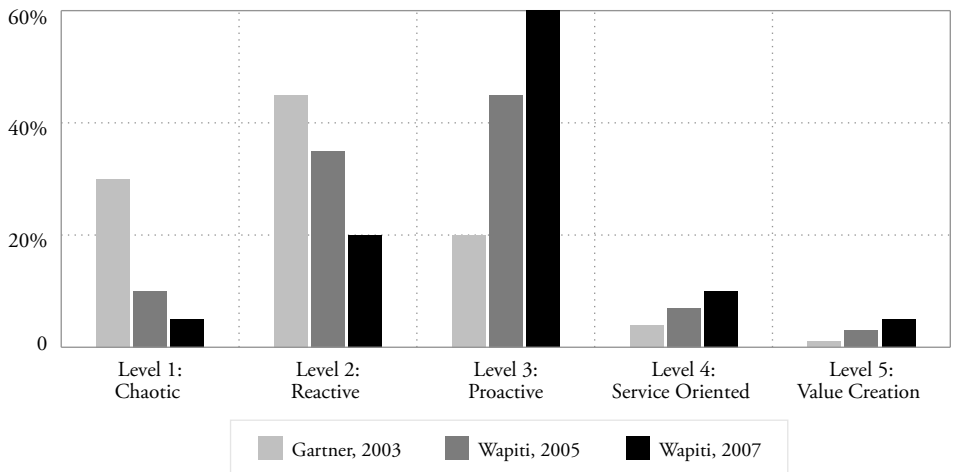
BDNA is one company pioneering this technology. Since 2000, the Mountain View, Calif.-based company has been quietly building technology that can be hooked to any communications network and automatically detect all the devices and software that reside on the network regardless of type. It detects all systems, both known and unknown. This is a capability that typical systems management software never had before—a view of all assets in any given IT category. As of mid-2004, BDNA had scanned the IT assets of more than 25 Fortune 500 companies. More importantly, it has now implemented its technology—complete with new layers for IT analytics and business intelligence—with a “select few” world class companies.

NEW DISCIPLINE NEEDED

IT managers who are satisfied with the status quo may not desire such examination and visibility of their asset base. According to Gartner, only a few companies have a truly enlightened view on asset and systems management; while most hover between a style of chaos and reactivity (see chart.) This is destined to change, however, as financial pressures force IT groups to either shape up or ship out in terms of asset management. The more intelligent and resourceful IT manager will survive and thrive in a more streamlined environment down the road.

Five IT Asset Management Styles Have Emerged

Gartner has identified five levels of maturity for asset management. Level 1 is chaotic, which by its very definition states that little if anything is done to control the assets. Level 2 is reactive and facilitates limited accountability by IT to manage the assets. The mid-way style, Level 3, looks at an entire life-cycle focus to manage all costs from initial purchase to disposal. Levels 4 and 5 (service-oriented and value creation, respectively) deal with much higher levels of asset optimization and opportunity management.



SOURCE: GARTNER, WAPITI LLC

Eliminating excessive IT spending requires change. Many groups need to recognize that the decentralization of the 1980s combined with the technology hype of the 1990s facilitated sloppy procurement practices and lax management. These practices and management capabilities need to be supplanted with clear operational goals and metrics. Effective use of IT is about good business; it is not about cool technology.

MOVING TO A SIMPLER MODEL OF IT

One offshoot of more efficient IT operations is a refocus on overall IT simplicity. Consolidation of hardware, software and vendors are part of this move and have been underway for the last 3 years. At the same time, companies have discovered that simple and easy-to-use solutions (and licensing mechanisms) decreases the risk of IT and increases efficiency.

- Salesforce.com changes the CRM market. Salesforce.com sells sales-force automation and other CRM-related functions through an inexpensive monthly subscription ranging from \$65 to \$130 per month per user. This sales model forces Salesforce.com to assume the risk - and capital needed - to implement SFA projects successfully.
- Microsoft shows less is more for CRM. Microsoft's low-end entry into the CRM space with a Outlook-based user interface has become quickly accepted by over 1,000 companies. While Microsoft's CRM customers acknowledge significant functional shortcomings, its familiarity and ease of use trump its lack of functionality.
- Large license deals on the decline. After a decade of six- and seven-figure up-front license deals, more and more software vendors are looking toward subscription-based licensing models where the vendors themselves assume the risk of successful implementation rather than the user doing so.

Software standards, low-cost offerings and a more accepted view of so-called "80-percent" solutions are changing the dynamics of IT purchases. Companies have discovered that a combination of new, subscription-based solutions and low-cost technologies are allowing them to better manage IT investments.

MOVING TOWARD STRATEGIC SPENDING

Eliminating wasteful and redundant IT systems is one of the first steps in making IT groups transform themselves into more efficient business organizations. These excesses have greatly contributed to extra spending and IT complexity. Some managers will not embrace such changes as they have built large IT organizations - and budgets - around the complexity.

There is, however, an accelerating move to better manage and understand IT costs. It is likely that the years ahead will be characterized by the following:

- IT-led productivity gains will occur only after companies get rid of excessive IT assets and programs. The most successful companies will be in cleanup mode for the next few years.
- The IT department of the future will have to manage distributed operations in many countries and understand how to apply IT strategically to business problems while holding down the cost of operations.
- The next 15 years of IT spending will be led by business managers looking for results rather than an installed base of cool technology.

All of these trends will combine to let companies deliver a higher level of business benefits at a lower technology cost. Key to this move will be a thorough review of technology spending and assets and then matching it with business results.

These changes indicate that “The Next Big Thing” in IT is not a “thing” at all but a new way of thinking where technology and business needs are blended together in harmony. The “technology-thing” of the past is being replaced by the “business-thing” and “budget-thing” as defined by those who master spreadsheets. It’s the bottom line and business benefits that survive this battle. A quiet pragmatism will emerge within a handful of companies, one that will call for a simpler, more efficient, business-driven view of how to deploy technology.

Smart companies will move ahead by spending less in technology and managing their assets in an intelligent fashion. The leaders of tomorrow will be viewed not by how much they spend on technology but rather on how they manage it and use it effectively. Only then will IT spending become strategic.

About the Author:

Erik Keller has been an active participant in the information technology industry for more than 20 years. He currently leads the consultancy, Wapiti LLC which he founded in January 1999. Erik is a Research Fellow in residence at AMR Research and a columnist for MSI Magazine. Prior to founding Wapiti, Erik spent more than a decade as Research Fellow and Director of Research for Enterprise Software at Gartner. He is the author of *Technology Paradise Lost* which predicts the future of IT spending in corporations.



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