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Incremental Steps to Achieve Radical IT Cost Containment

SWINGTIDE

Introduction

Information technology may not have been the sole contributor to the productivity growth of the American worker over the past few decades, but it is hard to imagine where the American economy would be without it. Notwithstanding Nobel Prize-winning economist Robert Solow's famous observation, "You can see the computer age everywhere but in the productivity statistics," the value of IT to American business is incontrovertible.

So incontrovertible, and so significant, in fact, that in the scramble to achieve that value colossal waste is tolerated. Failure rates of IT projects are reported variously from 30% to 70%, and the news is met with a collective shrug of the shoulders. Companies pay multiple times for the same software license, run redundant platforms with similar functionality, or continue paying maintenance on assets long since retired, while few people notice and even fewer care.

IT managers typically are careful stewards of their budgets and of their responsibility to their companies. No one embarks on a project, or submits an annual budget, intending to waste money. And yet it happens.

It happens in a fast-changing environment that exerts pressure on everyone to provide the next big winner. It happens to IT departments that are simply not staffed to analyze multi-year impacts, incorporate those impacts into future budget cycles, and clean up the effects of decades of in-with-the-new technology changes.

This paper is a high-level look at how and why it happens, how companies typically respond to the need to cut costs, and why these typical responses do not result in significant savings that are sustainable year after year.

It will also briefly explain how an incremental approach, guided by experts, can produce surprising results that transform the cost-cutting process from a painful chore to a fundamental, even radical, reassessment and revalidation of the business role of IT.

Why So Many Smart People Waste So Much IT Money

In *The Smart Way to Buy Information Technology* (AMACOM, 1998) authors Brad Peterson (a partner in business and technology sourcing at law firm Mayer Brown LLP) and Diane Carco (Managing Director at Swingtide, Inc.) cite several reasons why companies find themselves wasting IT money.

These range from the speed of IT (rapidly changing business and legal requirements, technological advances, price performance improvements), to technophilia (love of technology for its own sake instead of for its business value), to technical staff being asked to make business decisions, to vendor selling ploys, to the less than full removal of old technologies, to a fundamental misapprehension of the costs and benefits of a given IT function or project that stems from an inability to put costs in their proper business context.

> Trying to figure out a number to hang on the bottom-line value of IT [outlays] has stumped more MBAs than W. Edwards Deming. Even the initial price tag is practically unknowable. Hidden costs, like training time and short-term productivity losses, raise the complexity of the computation to something on the order of Riemannian geometry.
>
> — The Smart Way to Buy Information Technology

Why look at macro costs and benefits when waste typically occurs at the micro level? Because before determining whether a given software licensing arrangement, for example, is wasteful, one has to determine whether it is needed at all, and the latter determination cannot be made in isolation.

> A single piece of software, however indispensable to a technology project, is still only a brick in the building. It is too far removed from the business justification for the project to have assignable business benefits in itself. Its costs relate only to the project, and it's the project that must justify its business existence. In other words, finance has to make sure that the building is a prudent investment before it can get down to the cost of bricks.
>
> — The Smart Way to Buy Information Technology

The failure to fully cost-justify IT services at the business need level creates a downward spiral of IT effects without business causes. It leads to haphazard and unsystematic purchases and decisions. It means that people of good faith end up trying to figure out if buying that brick, or tuckpointing that wall, makes sense when they can't see the blueprints and don't know where the building is.

For better or worse, that's the situation many IT decision-makers find themselves in. They're forced to try to keep things running smoothly while faced with real uncertainty about which things are essential and which superfluous — all in a technology environment moving forward at warp speed and under extreme time pressure exerted by the exigencies of business and the demands of internal customers. Is it any wonder that waste exists?

Is it any wonder as well that ill-advised purchases continue to be made and insufficiently justified projects continue to be initiated? There is a technology gold rush going on, and companies dazzled by the glint of the nuggets are easy marks for IT vendors all too willing to sell them picks and axes.

It is a perfect storm for wasting IT money — free-range expenditures loosely joined to insufficiently baked projects in a technology-loving gold rush environment. Under this convergence even the most vigilant CIOs run the risk of being overwhelmed by ongoing maintenance costs on non-producing assets, functional duplication, and an inability to clean up the costs of superannuated technologies.

Now overlay the effects of mergers, consolidations, acquisitions and divestitures. Practically every IT department has faced or will face the difficult integration and assimilation problems corporate restructuring and realignment bring — and the effect can be to whip the perfect storm into a Category Five hurricane.

Typical Responses to Cost-Cutting Directives

The task of cutting costs intelligently is a difficult one. Nevertheless, as can be seen from the inset table, the stakes are high. Nobody knows how much of the hundreds of billions spent each year on IT by U.S. corporations is duplicative, or chases an ill-defined business need, or will end up as underutilized or stranded assets. Nor is it known which of the expenditures made in previous years is performing best. For the cost-cutter, it's a game of pick-up sticks. It can seem impossible to know whether removing one stick will disturb the others.

Expenditures for ICT Equipment and Computer Software for Companies With Employees: 2006

	2006 (millions)	
	Noncapitalized expenditures	Capitalized expenditures
Total expenditures for ICT equipment and computer software	**90,768**	**159,925**
Total equipment expenditures	**36,764**	**N/A**
Purchases	**18,612**	**100,585**
Computer and peripheral equipment	12,990	56,733
Information and communication technology equipment	5,334	39,237
Electromedical and electrotherapeutic apparatus	288	4,615
Operating leases and rental payments	**18,152**	**N/A**
Computer and peripheral equipment	11,805	N/A
Information and communication technology equipment	5,308	N/A
Electromedical and electrotherapeutic apparatus	1,038	N/A
Total computer software expenditures	**54,004**	**N/A**
Purchases and payroll for developing software	30,677	59,339
Software licensing and service/maintenance agreements	23,327	N/A

Source: Bureau of the Census

Faced with a task for which it seems no rational plan of attack can be developed, many IT departments implement one of three simplified, top-down cost reduction approaches: 1) staff reductions; 2) across-the-board cuts; or 3) reduction/elimination of discretionary projects. As will be seen, these approaches may not always yield the desired result.

The Staff Reduction Approach

In labor-intensive information technology, removing people is the simplest way to lower costs. Reductions in force can, however, be fraught with unintended consequences.

Leaving aside for a moment the serious issue of morale, a fixed-percentage staff reduction can leave holes in an organization the depth and consequences of which are

unpredictable and dangerous. Areas once staffed with knowledgeable managers and seasoned support staff end up being shifted to units themselves weakened by proportional cuts. When the inevitable functional gaps become evident, temporary workers begin to play a more and more significant role. Key IT services that business units or the corporate center depend on to meet their goals can be jeopardized by a loss of knowledge and a loss of personnel. Companies watch their irreplaceable knowledge base walk out the door and wind up with an itinerant and variable work force.

The staff reduction approach can also trigger a series of occurrences that can sink an IT department. The cycle begins with staff cuts. The staff cuts create break-fix crises on critical work. These crises force knee-jerk overspending solutions. The overspending ultimately results in staff cuts to save money — and the whole cycle begins again.

Staff reduction can be safe and effective and is sometimes very necessary, but it must be approached with caution. Opportunities exist in nearly all companies, but they must be approached systematically using a multi-year view based on an activity/value assessment validated by IT customers. A further analysis then needs to be made based on skills required, employee rankings, employee potential, and key position succession planning.

Across-the-Board Cuts

CIOs are routinely directed to make across-the-board cuts as part of a larger corporate profit recovery plan or cost reduction initiative (often G&A/overhead focused). The CEO or CFO announces a new strategic cost reduction initiative or tactical countermeasure to mounting earnings pressure or a revenue shortfall. The savings contribution hat is passed around, and as a good corporate citizen the CIO accepts IT's share.

To the extent that they refocus the IT organization on efficient delivery and maximizing business value, such initiatives can spur valid organizational introspection. However, they often are viewed top down ($10 million of $100 million budget) and end up

missing the mark and creating long-term problems. Here's how:

By aggravating a pre-existing underspending problem: An organization may already be underspending on IT or failing to invest enough in the right technologies, services, or projects when compared to the industry average, peer companies, or whether it needs to play technology catch-up or fill the role of industry innovator.

By blocking business unit and staff department operational savings: IT is the quintessential corporate enabler. Even during corporate cost reduction efforts, new investments in IT will often be required. For business units to achieve their cost-reduction targets, new processes need to be developed, greater automation employed, or new or enhanced tools and systems put on line. For example, to reduce nonessential travel costs, IT may be required to supply a videoconferencing solution. Similarly, an instant messaging system may be needed to enable reduced telecom costs. Across-the-board IT cuts may preclude such actions and end up costing the overall organization more in the long run.

By focusing on ineffective cost-cutting instead of real sustainable savings: Sometimes belt-tightening does nothing but leave an organization with a stomach ache. An across-the-board hiring freeze, for example, may show the corporation seems to be doing all it can to cut costs but ultimately yield insignificant or non-sustainable savings while creating a distraction, employee dissatisfaction, or worse.

Broad-brush cuts are a risk. They take IT's attention away from the big picture, impair its ability to align its services to business needs, can tie its hands, and are sometimes more symbolic then financially meaningful in the long run.

Reduction/Elimination of Discretionary Projects

Another common response to the cost reduction problems faced by today's IT managers is to cut, defer, or reduce discretionary projects. On the surface it makes sense, as these efforts are often staffed either fully or partially with external resources and add new hardware, software, and maintenance to an already complex environment. A deeper look, however, identifies some inherent problems with the "gut approach" to reducing discretionary project spending.

Abrogation of benefits identified in project business case: When the business case on a project is assembled and approved across the organization, it usually has significant positive benefits that outweigh the one-time and ongoing costs of doing the project. Eliminate the project and eliminate those benefits.

Failure to align with business needs: Fairly or unfairly, elimination of projects will cause some to believe the IT organization is not in tune with or sensitive to business needs. Minimizing this damaging perception requires careful consideration of which projects to reduce or eliminate.

Deferral of costs versus actual cost savings: When companies approach cost reductions in the area of discretionary projects, they need to be cognizant of whether a reduction will create real savings or merely defer costs to a future period. There are sunk costs (hardware, software licenses) that may not be re-utilized. There are also inefficiencies caused by starting, stopping and re-starting projects. Knowledge and project momentum lost in this process can easily increase project costs.

One-time versus ongoing savings: In many cases elimination of a project results in one-time savings of project dollars earmarked for the current year. While attaining one-time savings is often a key component of the incremental approach, it is far less significant than finding sustainable reductions.

A detailed project portfolio review is a key component of any cost reduction exercise. It is estimated that over 60% of old technologies are not completely removed from the IT environment. Today's service offerings and new projects will become tomorrow's old technologies sitting in the corner of the data center. A comprehensive approach using a multi-year focus, with an emphasis on eliminating all aspects of old technologies, is required to maximize recurring savings from project reviews.

An Incremental Approach to IT Cost-Cutting

In mathematics an *increment* is the increase of a function due to an increase in an independent variable. The independent variable in effective IT cost-cutting is the level of experience the cost-cutter has in recognizing patterns of duplicative and wasteful spending, and the ability of the cost-cutter to apply a well-thought-out methodology to align current costs to current business requirements.

This is not a game for IT managers looking for the quick knockout punch. The experienced cost-cutter prepares for the fight with a plan that includes a thorough analysis of his or her opponent. Then, armed with knowledge gained from the necessary preparation (asset and capacity reviews, project portfolio analysis, and benchmarking analysis, for example) he or she probes and jabs, looking for the right opening. The goal is to find areas that can be cut without losing a balanced alignment with business units objectives. Not with a roundhouse punch, but with many smaller incremental hits or savings.

Where are these opportunities for incremental hits? They exist in every organization, often in situations so mundane and low-profile that they are easily overlooked:

- Employees meticulously store fiche in a storage room, with storage trays to keep them neat and much care given to proper filing. They even hire a company to maintain their fiche readers. Meanwhile, an outsourcer is producing the fiche and

billing the company (two copies of each output). Another company is being paid to store previous years' fiche offsite in records retention. None of it is being used, as the information being stored is already online.

- A company enters into an agreement to standardize print throughout many locations. It gets purchasing power savings, standardized equipment, lower support costs and elimination of standalone printers and the resulting supply savings. However, the agreement it signed provides help desk support with a new vendor that is identical to help desk support already included in outsourcing vendor (different company).
- Companies paying their outsource providers for email boxes and storage for files of ex-employees and consultants who left months or years earlier
- Companies paying outsourcers a per-call fee for help desk calls when the calls are wrong numbers
- Locations that have been closed and companies still paying maintenance on old phone switches whose leases have already expired
- Companies storing leased equipment (PCs and routers) and paying month-to-month fees in a warehouse for leases that have already expired
- Lost leased equipment for which companies continue to pay lease fees
- Maintenance at a level too high or on assets that cannot be found
- Software license and maintenance for a product not used

As a boxer does, the smart cost-cutter works the cost opponent from top to bottom. "Run the business" costs (such as those thrown off by the situations listed above) and discretionary projects can be worked first, but the process should then progress to an analysis of the benefits of projects in the queue and how they impact the current and future cost environment. For example, if a new application that will sunset some existing applications for a business unit will be in production in the following year, it may be possible to turn off maintenance on the old software, as the current support is negligible and upgrading is not

even a possibility. A small item, but small items can add up to big savings.

A clear understanding of the current cost environment, or baseline, is vital. The good cost fighter not only makes sure that the CIO's costs are identified and understood but looks at the hidden IT costs that might be spread throughout the organization. Some of the areas to be investigated include:

- Service Bureau Expenses — Probing for those contracts that provide hosting fees
- Travel and Expense Reports — Identifying Telecom expenses that are buried deep within expense reports
- Software Expenses — What third-party software is being acquired and introduced into the network
- Technology Assets — Review the ledger to see whether there is a rogue business unit acquiring IT assets

Once the cost-cutting fight begins in earnest, it is important to revalidate the goal. If the goal of the activity is just to cut costs in the current year (which it seldom is), then a simple freeze on new spending would be sufficient. It could be a hiring, travel or discretionary projects freeze. However, this approach risks creating damage that might outweigh the benefit of one-time cost savings. The true fight is to take the costs and benefits mentioned above and validate them with the ultimate users of those services. Eliminate the waste and achieve *repeatable* cost reductions.

To accomplish this validation, the IT cost baseline needs to be driven down to IT services. This analysis is not mere identification of the direct costs, such as software, needed for a network. It should account for all secondary costs, including items such as security or architecture. All costs need to be driven down to activities or services that are provided to customers. Once costs of services have been identified (this can be done by means of an Offerings Catalog), the user needs to be identified, and specific consumption identified down to the lowest level possible. Ownership of a database might be correctly assigned to an

individual resource or to a larger business unit, for example, but until costs are correctly allocated, cost-cutting cannot be properly pursued.

Once costs have been assigned to services and to customers, the findings of cost-cutting analysis must be presented and validated for their ultimate business benefit. Users may start seeing stars as applications high in costs and low in value are identified. Perhaps the consumer is not even aware of what is being consumed. Perhaps he or she is unaware that a nonstandard database selection increased the cost of support by 400%. This is a common occurrence, as project staff is almost always so concerned with the implementation of the new application that they rarely address the old system and its timely shutdown. Ultimately, the efficient management of demand requires a thorough understanding of consumption.

Almost all CIOs can build a mental list of projects that should yield immediate savings, as well as some that will need to be worked to eliminate services that are expensive but provide very little benefit. Comparing the cost of services to other affiliates or similar companies can help guide the process to an intelligent and fruitful conclusion. How do current service costs compare with the rest of the world? Are the same or better services available through other alternatives with a lower or more variable profile?

The variety of opportunities to eliminate waste can be overwhelming. The devil is in the details, but so are the real savings — savings that will fall to the bottom line or can be reinvested in other projects that will align with business units' objectives and lower overall costs.

Conclusion

One can debate whether the information technology gold rush is still in its early stages, with users acquiring new picks or shovels in anticipation of finding the mother lode of technology efficiency, or whether it has progressed to a more mature phase in which picks and shovels simply need to be kept sharp for mining operations to run smoothly. But there is no debate that, at any phase in the process, radical cost reduction can greatly improve an IT

As cost pressures increase, CIOs need to prepare their organizations for the type of scrutiny that line departments in manufacturing companies have lived with for years. These departments search for savings in the wattage of light bulbs, thermostat settings in a plant, or office supply costs, while across the hall IT launches a multi-million-dollar project with patched together benefits and a 50% chance of success.

Successful and sustainable cost reduction initiatives are rarely achieved without using a detailed, incremental, fact-based approach. These initiatives need to identify service offerings, assign all IT costs to those services, solicit customer input and validate their true usage needs, and compare resulting rates with those of alternative delivery options.

Cost containment projects will yield benefits commensurate with the preparation, expertise, and effort put into them. Done correctly, they can achieve impressive results. The careful steps necessary to find cost-cutting opportunities are small and recursive. The gains grow incrementally when the process is followed correctly.

The concepts and approaches described in this paper are designed to get at the "root cause" of waste — failure to match IT spending to real business needs. Every small area of IT excess is both a problem in itself and a symptom of a larger problem — namely, the failure to see IT spending as a business investment to be weighed and assessed in exactly the same way as any other business investment.

Emotion-driven decisions and "sacred cows" have no place in an IT department dedicated to providing business-aligned services. To the extent that extirpating IT excesses gets everyone thinking in terms of real business value, the incremental search for savings can be said to be truly *radical* (from the Latin *radix*, root). It has the potential to help transform an IT department by reminding it of its obligation — remembered by most but still not by all — to assure that *every* run-the-business activity, and *every* project, should be corporate money well spent.

If you are interested in discussing the concepts in this white paper, contact:

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About Swingtide

Swingtide, Inc. is a technology and management consulting firm dedicated to client results and service excellence. Each Swingtide practice area is staffed with senior business and IT professionals with the experience required to solve complex business problems in rapidly changing environments.

Founded in 2001 with backing from Pequot Ventures and private investors, Swingtide helps its consulting clients reduce costs, efficiently outsource and effectively complete mergers, acquisitions and divestitures, successfully adopt new technologies in the area of web services, and realize the benefits of other new technologies in information-intensive industries including insurance and financial services.