"IT Rightsizing"

A value-driven approach to reducing IT costs   *March '08*

The credit crisis, increasing energy prices and overheated stock markets are all indicators for a possible economic downturn. After several years of growth, most industries are set to face tougher conditions and will have to apply downward pressure to costs as a result. Like all budgets, IT budgets will be cut, with every IT cost item coming under intense scrutiny as businesses look for possible savings. A "lawnmower" approach in IT however, where costs are trimmed across the board, can have a significant negative impact on the business in the medium to long term.

IT "rightsizing" is a balanced approach to cost reduction which generates sustainable savings while maintaining the strategic and operational value of IT. For every IT cost item, this approach asks: What is the business value we gain from this cost? Do we need this amount of value – or can we do without it or with less? How much can we reduce cost without endangering the rightsized value? From our experience 20% reduction is a realistic target.

Seven ways to generate savings

Below, we outline seven areas which, in our experience, have the most significant potential for generating savings. In some areas, the question of value prevails while in others the cost perspective dominates. Quantified possible savings in this article are examples to indicate the scale of reductions IT rightsizing can deliver, but might not apply to the specific situation in your firm.

1. Streamline the project portfolio

Projects are usually the first candidates for IT budget reductions because they appear to offer easy savings. Simply by not starting a project, the business saves on investment in new software licenses, consulting and system integration effort. Project cancellations however have only a limited impact on costs. Since most of the spending can be capitalized, the impact is limited to the saved depreciation (20% of project cost assuming a five-year depreciation period). Furthermore, no business value can be generated if the project is dropped. Take, for example, a project with a three-year payback period. Cutting this project will actually have a contrary impact on the P&L in the following year. A really careful review of the project portfolio and the

business case for each project is crucial to avoid such pitfalls.

A practical way to rightsize the project portfolio is to divide projects into "must do" (legal requirement), "high value" (with a payback within three years) and "others", and then to undertake a rigid review of the underlying business cases. We estimate that, on average, 30% of a business's project budget can be cut without negative impact in the short to medium term.

The total cost of ownership of an IT application lies in the requirements from which the application originates. Requirements that are specific to the business are a key cost driver because the development or modification of standard software required will persist through the whole lifetime of an application (typically more than ten years). Therefore, the questions to apply to any new requirements are: What value does this requirement deliver? Can we simplify the requirement? Can we achieve the same value with standard software or functionality? We estimate a 20% reduction in project costs can be achieved by simplifying requirements.

2. Review IT service requirements

IT services, such as maintaining and operating applications and databases on central servers/host systems, supporting desktop PCs and laptops, staffing the user help desk and maintaining the network, are all essential to the running of the business. However, the cost of running IT services amounts on average to 50–70% of the total IT budget and, as such, demands a close look when it comes to cost reduction.

Businesses using the value-driven rightsizing approach need to look at IT services in terms of business requirements first of all, before approaching costs. IT services can be divided into application services (e.g. running the financial reporting application), infrastructure services (e.g. providing desktop services and a help desk) and general services (e.g. training end-users). Rightsizing asks two things: Do we need the service at all? Or can we reduce the service level?

When reviewing the application portfolio, the first objective is to identify unused or underused applications. In large organisations, there are often applications that are no longer used or that have few users and/or a low computer load.

Another opportunity for short-term savings is the application maintenance budget since it often contains a reserve for small and short-term requirements. Most applications will run without problems for a year or more with a reduced maintenance budget.

Further savings in the IT services budget can be achieved by reviewing availability requirements for applications. Often applications are operated with a high-availability server infrastructure without a concrete business need. While high-availability servers make sense for business-critical applications, standard servers deliver sufficient availability for many support applications at much lower cost.

Similar opportunities for reducing service levels exist for IT equipment such as PCs and printers. As an example, a premium service level for a desktop PC might assure a replacement within two hours, while a basic service level would guarantee replacement the next day. The difference in cost between the two could be as much as 50%.

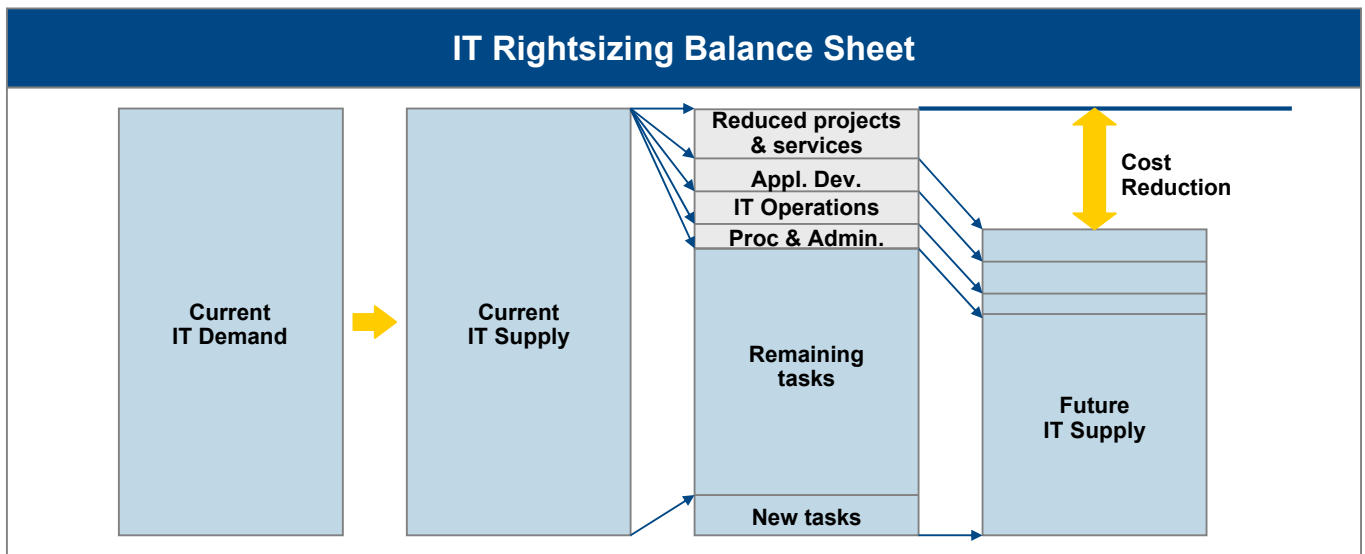## 3. Apply discipline to application development and maintenance

The cost of application development and maintenance lies in software maintenance fees and personnel costs for internal or external development staff. While maintenance fees are not generally negotiable (e.g. for Microsoft and SAP, which are the biggest chunks in the software fee budget), minimizing the necessary licenses through company-wide license management can yield savings.

Change requests are the main driver of application development costs, since every change generates effort from specification, through coding, test and implementation. Tighter project management, the freezing of requirements and minimum quality standards for specifications can all deliver significant savings. Similarly, offshoring (nearshoring) development and maintenance work can generate savings of up to 50% (25%). However, a minimum work volume of approximately 2,000 man days (i.e. 10 Full-Time Equivalent) is necessary to justify the cost of switching and additional management effort.

In both cases, more discipline in project management and internal processes is a must for the IT department as well as for the business side. Given that not all applications are suited to offshoring or nearshoring and that some activities need a local presence, the total bottom-line impact on the application budget is around 10%.

Balanced IT Rightsizing		
IT Governance and Organization		
IT-Demand	**IT-Supply**	
Project Portfolio "change the company"	**IT Administration**	Personnel Cost
	Application Development & Maintenance	**Procurement** - Hardware - Software Telecommunications - Services
IT Services "run the company"	**IT Operations** - Data Center - Network - Enduser-Equipment	
		Depreciation

IT Rightsizing Balance Sheet

| Current IT Demand | → | Current IT Supply | Reduced projects & services / Appl. Dev. / IT Operations / Proc & Admin. / Remaining tasks / New tasks | Cost Reduction / Future IT Supply |

4. Improve IT operations

In IT operations, within the data center, the biggest cost item is the hardware, i.e. server and storage systems. One way to reduce costs in the short term is to increase the utilization of system resources. Often servers are used to maximum capacity only at peak time and otherwise have a utilization rate of less than 20%. Using server consolidation and virtualization techniques the load on the server can be increased and the purchase of new hardware delayed. This could reduce server hardware costs by approximately 20%.

Personnel cost is the next significant cost item in the data center. Since most manual work has already been replaced by automation, further savings are mostly only possible through outsourcing the data center or by using externally managed services where personnel is shared with other customers. Net savings can reach 30%, depending on the scope of the work outsourced. Paying for services by usage (rather than with a fixed fee) can contribute to these savings. In addition, new sourcing models, such as SaaS (Software as a Service), promise further cost reductions since they are provided without a dedicated IT server infrastructure.

IT operations outside the data center comprise end-user equipment (PC, notebooks, printers etc.) and most of the corporate network. The biggest savings can be achieved through the standardization of hardware and software. Our experience shows that up to 30% of end-user equipment cost can be saved through reduced service costs for standardized equipment. In networks, major cost reductions can be achieved by outsourcing the entire network service, including local and wide-area networks and telecommunications. For desktop services, outsourcing is today's standard option since it delivers both cost savings and often better service quality.

5. Apply best practice to IT procurement

On average, more than 70% of the IT budget is used for external purchases, be they hardware, software, telecommunications or services. Applying best purchasing practices can bring additional savings on top of those outlined above. Best practices include consolidating IT suppliers so that the business uses just a few strategic providers, using competitive bidding processes, negotiating frame contracts etc. Applying best purchasing practices can deliver savings of up to 10% of the IT purchasing volume.

6. Simplify IT administration

Roughly 10% of internal IT staff undertake administrative tasks: management, cost accounting and chargeback, service management, procurement, training, license management, internal moves etc. Administrative costs are driven mainly by complexity. Multiple layers of management, small span of control and lack of standardization in IT processes are all typical signs of complexity and generate unnecessary administrative effort. Online self-service tools for IT planning, the ordering of IT services and procurement can reduce administrative tasks In addition, up to 30% of administration cost can be saved when lean structures, processes and tools are applied to IT.

7. Improve IT governance and organization

Decentralized IT staff, lots of uncoordinated projects, local IT procurement: these are indicators of a lack of IT governance and often a duplication of effort between central and localized IT. Highly efficient IT is only possible with clearly defined governance rules and within a lean organization.

Best practice IT governance and organization includes: centralizing (or at least centrally managing) all opera-

tional IT resources (application development, systems operations, support); having staff within business departments/units to manage demand and define business requirements; and taking IT decisions through an IT council where business unit managers and IT management decide on the budget and the IT strategy.

In an international firm, additional savings can be generated through global IT organization and governance. By standardizing application and infrastructure technology worldwide – which is not a quick win but a long-term goal – it is possible to share IT resources across countries and shift work to lower wage countries (a kind of internal offshoring). Potential savings through the centralization of IT operations and the resulting synergies can amount to approximately 10% of IT staff.

How to approach an IT cost saving program

Many of the savings options outlined above cannot be delivered by the IT department or the CIO alone. The business must be involved in making decisions on value, whether the project portfolio is under review or reductions in service levels are being proposed. Often the business expects the IT department to become more efficient, without the business changing its own IT requirements and behavior.

Many projects carried out by Arthur D. Little demonstrate a successful approach for achieving reductions in IT costs:

- Conduct a benchmarking of IT cost to understand the current cost level and the savings potential.

- Set a clear, quantified target for cost reduction (e.g. reduce IT cost by 30%), depending on the benchmark.

- Let IT generate the first cost-reduction ideas and divide them into two groups: those dependent on the business and those not.

- Generate IT cost-reduction ideas with business (management and key users).

- Consolidate ideas from IT and from the business, and evaluate their savings potential and feasibility.

- Present savings measures to business and IT management for review.

- Present savings plan to executive management.

- Set up implementation controls to monitor cost-saving activity and improve IT's performance against specific KPI (key performance indicators).

In many projects, Arthur D. Little has achieved significant IT cost savings, with a short-term reduction of up to 30% and medium- to long-term savings of up to 20%, i.e. the baseline IT cost could be reduced by 20%.

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