Capturing value through IT consolidation and shared services

Agencies should look beyond data-center consolidation for opportunities to streamline IT assets. By pursuing a range of initiatives, agencies can boost effectiveness while cutting IT costs by up to 20 percent—without reducing head count.

Ankur Ghia

Many public-sector chief information officers (CIOs) intuitively know that they could be getting significantly more bang for their IT buck. They are aware that their organizations own underutilized IT assets: servers with extra capacity, dozens of data centers that are expensive to operate and maintain, and redundant and subscale IT shops. In most cases, government agencies accumulated these assets over decades; as government expanded, agencies built more IT infrastructure, but as technology evolved, agencies did not consistently "clean house" and streamline their asset base.

In general, government CIOs recognize the untapped savings in IT consolidation and, ultimately, in adopting a shared-services model

for IT. But even in countries where policy makers have mandated such efforts—the United States, for instance, where the government has called for the closure of 800 of its 2,000-plus data centers by 2015—many agencies are unsure how best to proceed, given that their experience has been in adding capacity to meet individual program needs rather than reducing IT assets. And those agencies that have already embarked on consolidation programs seldom look beyond data centers, thus missing out on other opportunities to reduce IT costs while boosting effectiveness.

Data-center consolidation is only one way of capturing value. In fact, in our recent work with several civilian and defense agencies, we have

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uncovered opportunities to reduce overall IT spend by as much as 20 percent through various consolidation and shared-services initiatives. Furthermore, agencies can capture the benefits of many of these initiatives without reducing head count or launching a disruptive reorganization. In this article, we identify the main levers for capturing value from IT consolidation, and we summarize the organizational and process-related factors that have helped agencies successfully implement an IT consolidation program or, in some cases, an IT shared-services model.

Where the opportunities lie

Opportunities for IT consolidation—whether in IT infrastructure, end-user support, application development and maintenance (ADM), or management and administration—abound in public-sector organizations. A typical agency can take advantage of 20 to 30 consolidation opportunities, each of which falls into one of the following categories: better utilizing capacity, pooling IT staff, sharing best practices, consolidating procurement, and managing demand through central governance. Some of these initiatives can be implemented fairly quickly, while others require dedicated, longer-term efforts to restructure the way IT services are delivered.

Utilizing spare capacity to eliminate waste.
Even an agency with only a single data center is likely to own servers with average utilization below 5 percent and server racks with spare capacity. In our experience, most public-sector servers within data centers are only about 20 to 30 percent utilized on average per day, compared with 70 to 80 percent in best-practice companies. A European government, in outlining a number of options for IT consolidation, found that consolidating servers and data centers would yield annual savings of 20 to 30 percent on a baseline of more than €500 million.

Some agencies have begun to consolidate their data centers using a two-tier approach: they have started to "virtualize" their server environment—thus reducing the number of physical servers they own—and have then consolidated the remaining physical servers into fewer data centers. (For a case example, see "A city consolidates its data centers," p. 24.)

Data centers represent clear, short-term opportunities to capture value by better using existing resources and forgoing future IT purchases. But agencies should not stop at data centers; they can similarly rationalize and consolidate other technology assets—call centers, for instance, as well as IT networks and domains.

Pooling IT staff to capture scale advantages.
Particularly in an IT environment that consists of small, subscale IT shops maintained by individual offices and bureaus, pooling IT support staff can be a significant lever. Because most IT shops are staffed to handle peak workloads, employees are underutilized during most of the year. Pooling typically results in faster and better service. It can also reduce dependency on contract labor, as specialized skills are more likely to be found in a larger, pooled support organization than in a subscale IT shop.

One public-sector agency had traditionally operated its data center with a "box owning" mentality—that is, systems administrators were dedicated to particular applications regardless of how much or how little work those applications needed. As a result, administrators dedicated to highly demanding systems were often overloaded, while those in charge of less demanding systems were busy only

once every two weeks. Pooling these systems administrators allowed the agency to normalize the workload and free up 30 to 40 percent labor capacity for additional work. Pooling requires thoughtful preparation, collaboration with employees, constant and transparent communication, and recognition of the unique skill sets of the employees being pooled.

Sharing best practices across organizational silos. An additional benefit of pooling is that it lends itself to the sharing of knowledge and best practices across organizations, which can drastically improve service quality and efficiency. For example, in assessing several agencies within the same government department, we found a tenfold variation in the productivity of call-center agents. Site visits and interviews with agency staff revealed that the variation derived in part from some agencies' use of special remote-resolution tools (for example, remote takeover of user PCs) and call-center-agent scripts (such as a basic checklist of items to cover during a call) that allowed agents to take more calls, resolve issues faster, and prevent incidents from recurring. When all agents in the department began adopting those practices, some of which required little or no IT investment, the agents who had previously been low performers improved their productivity.

Agencies can use a range of tools to gather and disseminate best practices. Some agencies use a central online knowledge repository to collect knowledge assets and ensure that they are available across the organization. Others have implemented peer-to-peer structures for disseminating lessons learned in the work environment—for example, brown-bag lunches for knowledge sharing or "shadow" programs in which employees learn by observing other employees as they perform their day-to-day tasks.

Using common pricing practices and consolidating procurement. We have observed sizable differences in the prices that governments pay for hardware and software. In the United States, despite detailed contracting and procurement schedules and guidelines laid out by the General Services Administration, one agency might pay twice as much as another agency for similar computers and mobile devices. Pricing of services is even more difficult to standardize; not surprisingly, wide variation exists in that area as well.

These pricing variations exist for several reasons. One is that subscale agencies tend to benefit from fewer discounts than do larger agencies with greater buying power. Also, agencies in a single department may be using different vendors for the same or similar commodity IT purchases, thus limiting the department's buying power. Another reason for price disparities is that some agencies operate on a staggered buying schedule—they negotiate prices for piecemeal purchases rather than large multiyear contracts. Finally, there is little product standardization in the federal government, and customized orders are always more expensive.

Centralized procurement would address many of these issues. Agencies that centralize procurement plan and schedule periodic spending (such as PC upgrades) in advance, buy products in bulk, and distribute them to users in a timely manner. They evaluate and, where possible, aggregate unplanned purchases and procure them through a competitive process. At such agencies, most planned and unplanned purchases are

standardized and often available through an IT product/service catalog developed by the central IT function. Undoubtedly, some agencies will occasionally need to make specialized IT purchases (an agency might require satellite phones, for example), but these will be the exception rather than the rule. Agencies should define standardized processes and escalation mechanisms for exceptions as well.

Managing demand through central governance. Demand management is one of the most important levers for capturing IT consolidation savings. A central governance body can eliminate unnecessary IT expenditures or aggregate similar IT purchases into a standardized product or service. Although many agencies have groups (often called investment-review boards or change-control boards) that are meant to serve such a purpose, challenges remain. Such groups are often decentralized, which means they have no cross-agency visibility; their power may be limited, in that they serve a tracking function but have little decision-making authority; or their scope may be quite narrow (for example, they may oversee only certain small pockets of IT). In best-in-class companies, a strong central governance body owns the IT product/service catalog, manages IT requirements and demand, and coordinates procurement activities. Often, this central body also has budget authority over IT spending and maintains continuous engagement with internal customers.

A European government recently moved toward best practice by appointing a national CIO charged with developing a strategic view on IT for the national government and aligning ministry CIOs on key IT standards and objectives. Although ministry CIOs do not report directly to the new national CIO, he has the authority to review and influence the ministries' IT road maps and large projects. He is also in charge of nationally deployed transformation programs, including data-center consolidation and the creation of a single IT network for all government ministries.

Establishing a central IT governance structure is a long-term effort that requires full engagement from stakeholders and senior leaders both within the IT function and across government; a detailed understanding of each agency's IT requirements is also necessary. The first step in establishing such a structure is a thorough analysis of user needs, followed by more tactical steps such as the development of IT product/service catalogs, the design of charge-back mechanisms, and the creation of an end-state governance map that clearly defines roles and responsibilities.

Success factors in implementation

The exhibit shows how an agency might prioritize its consolidation initiatives, taking into account each initiative's savings potential and implementation timeline. In our work with public-sector institutions worldwide, we have found that IT consolidation is not easy—but it is achievable. Success often depends on adhering to four core principles.

Adopt a customer-service mind-set. Every user of IT services, regardless of which unit or organization he or she belongs to, should be viewed as an equal customer. Often, a department creates an IT shared service simply by merging smaller IT functions into the largest agency's IT organization. In these cases, leadership must ensure that the needs and requirements of all agencies are understood and

Exhibit

Initiatives can be prioritized based on timing and potential savings.

ILLUSTRATIVE

Potential savings

High

Medium

Low

6–12 months   12–24 months   24+ months

Timing of the initiative

■ Infrastructure
■ End-user support
■ Application development and maintenance
■ Management and administration

Utilizing spare capacity

a Consolidate data-center hardware
b Improve hardware utilization
c Improve utilization of data-center square footage
d Consolidate and rationalize networks and domains
e Consolidate call centers

Pooling IT staff

f Pool, streamline, and improve the skills of data-center staff
g Increase call-center productivity by pooling staff
h Pool end-user support and improve coverage

Sharing best practices

i Use online tools and effective IVR[1] to reduce call volumes
j Move tickets upstream from on-site support to call centers
k Use scripts and other tools to improve resolution rate
l Use lean techniques to improve operational efficiencies

Using common pricing and procurement

m Move data centers to lowest-cost locations
n Move to best pricing for desktops and laptops
o Standardize contractor rates
p Reduce contractor overhead and support spending

Managing demand through central governance

q Reduce number of devices per employee
r Improve license procurement and management
s Increase device life span
t Manage demand and rationalize scope of programs
u Streamline overhead and support roles

[1]Interactive voice response.

that standard service-level agreements are in place to measure the quality of IT delivery. When a European government recently undertook a consolidation effort, it made sure to select the new central IT organization's leaders from among several agencies—including the smaller agencies—so that smaller agencies would not feel as though they were victims of a hostile takeover. The leaders of the central organization took pains to assure all agencies that their needs would be heard.

Create a road map and pilot each opportunity. IT consolidation is often a multiyear journey. Many constraints—contract structures, lease agreements, and management focus, to name just a few—can limit the speed of implementation. Successful agencies thus create a portfolio of both short- and long-term initiatives that spans multiple years. They pilot each initiative to validate opportunities and refine the action plan, and only then do they design a detailed blueprint for rollout. For example, during an operational-improvement pilot in a public agency, the agency's leaders realized that a component of the action plan they had previously designed was unworkable in a real-world scenario: the plan called for the relocation of a small number of employees whose labor contracts stipulated that they remain at their current location. The agency leaders collaborated with frontline IT staff to modify the design: instead of relocating the employees, they set up virtual work environments for those employees. After only a few weeks of testing and refining, agency leaders and staff were able to roll out the new operating model.

Foster 'champions' within the agencies. Cultural challenges are often the most difficult to overcome. Employees can be set in their ways, believing that their environment is unique and that consolidation could disrupt the agency's mission. To combat this mind-set, leaders should engage key stakeholders within each agency early in the process and enlist their help to drive the initiatives. Having stakeholders lead initiatives can help ensure implementation and adoption. One agency currently undergoing a large-scale IT transformation has created a steering committee with eight members from across the organization. Most of these members do not have an IT background but sit in functions (such as human resources, communications, and finance) that will play critical roles in moving the transformation effort forward.

Work collaboratively with unions. Labor unions are sometimes neglected during IT consolidation efforts. If leaders foresee any impact on the workforce, the union should be involved early and often. Sharing the goals of the effort and maintaining a partnership with the union (for example, by having a union representative on the steering committee) can go a long way to avoid lengthy bargaining or negotiations later in the journey. In a recent data-center-productivity effort for a civilian agency, the agency's leaders worked closely with the union to implement a new operating model within weeks of developing a design. Agency leaders nurtured the relationship by regularly communicating with union leaders and ensuring that their feedback was incorporated in the final plan.

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Consolidating IT functions and establishing shared services is a long-term commitment: a marathon, not a sprint. Quick wins are important to gain momentum and to capture some short-term savings, but lasting change takes a dedicated, sustained effort within and across government organizations.○

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