

WHITE PAPER

Application rationalization: A powerful catalyst for IT consolidation

Application portfolio rationalization is a powerful catalyst for state and local government IT consolidation and transformation initiatives when based on a rigorous assessment aligned with organizational goals and proactive efforts to manage change.

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Executive summary

IT consolidation tops the list of priorities for state CIOs in 2011. Since as much as 80 percent of a state's IT budget is allocated to application maintenance and support, Application Portfolio Rationalization (APR) should be given due consideration as a catalyst for achieving consolidation goals. While financial constraints are often the driving factor behind embarking on an APR endeavor, other drivers also make a compelling business case. These include data center consolidation efforts, organizational restructuring or agency mergers, technology transformations such as virtualization or cloud computing, or simply years of unchecked growth in the application space. Inherent risks exist with any consolidation or rationalization effort; however, when they are executed with these potential risks in mind, the benefits can be significant. Based on years of application portfolio management experience in the public and private sectors, CGI has developed a proven methodology for rationalizing the application portfolio to help state and local governments achieve near-term and long-term cost savings while also reducing risk.

Catalyst for change

Although public sector organizations agree on the inherent value of APR, most are challenged to dedicate the time and resources to do it. In today's economic climate, however, there should be a renewed sense of urgency for APR as a powerful catalyst for strategic initiatives, including:

- Infrastructure and data center consolidation
- Shared services
- Migration to new technology platforms and delivery methods
- Application modernization and replacement
- Enterprise architecture
- Enterprise data management
- IT governance

INFRASTRUCTURE AND DATA CENTER CONSOLIDATION

As part of any IT consolidation effort, particularly a data center or infrastructure consolidation, an essential component of success lies in the state of the application portfolio. If the portfolio is in need of modernization or rationalization, those efforts must be accomplished prior to the consolidation or migration of the infrastructure. Failure to do so will result in extended efforts and costs to accomplish the consolidation and the benefits may not be achieved. CGI's thorough approach to mitigating the risks and maximizing the benefits of data center consolidation is described in a complementary paper entitled, "A Comprehensive Strategy for Successful Data Center Consolidation."

APPLICATION MODERNIZATION AND REPLACEMENT

State and local governments are running numerous applications that are built on outdated technologies. Some are using hardware and software platforms that are no longer supported. Not only do these applications limit a government's ability to operate as modern organizations in serving citizens, but they are also very expensive to maintain and operate. Many legacy applications are vital to the business of government for protecting public safety, collecting revenues, distributing benefits, etc. APR can help prioritize such applications for modernization and replacement.



FIGURE 1: STATE CIO PRIORITIES FOR 2014

Priority strategies, management processes and solutions

- 1. Security
- 2. Consolidation/ Optimization
- 3. Cloud Services
- 4. Project & Portfolio Managment
- 5. Strategic IT Planning

(Source: NASCIO State CIO Survey November 2013)

In addition, when migrating to a common technology platform to reduce license fees, organizations should first know whether all applications in use are really needed before they are moved. APR can help size the challenge and contribute to the technology vision for consolidation. APR can also be used for defining consolidation opportunities prior to making modifications to meet new federal standards (i.e., ICD-10).

FINANCIAL CONSTRAINTS

State and local governments continue to face unprecedented fiscal crises — from drastic revenue losses to resulting cuts in budgets and programs. With IT departments under pressure to free up scarce resources to do more with less, it is not surprising that "consolidation" is high on the list of priority strategies for state CIOs for 2014 (Figure 1).

While many consolidation initiatives are focused on infrastructure, CGI has found that reducing application support costs and streamlining business processes can yield 4X greater savings than with infrastructure consolidation alone. Industry analysts estimate that the average IT organization spends 70 percent to 80 percent of its budget on support and maintenance tasks and the remaining 20 percent to 30 percent on development tasks. Yet, most application portfolios are not well understood or managed.

KEY BENEFITS

By applying measures to rationalize portfolios based on criteria that are aligned to organizational goals, APR helps transform an agency's or department's ability to manage costs by identifying not only where all of its applications are, but also whether they are really needed. Among the primary outcomes are reduced IT maintenance and support costs, better quality and cycle times, increased end-user productivity and more tightly integrated systems. APR also creates a strategic vision for managing the portfolio going forward. Figure 2 delineates near-term and longer-term benefits of APR.

FIGURE 2: BENEFITS OF APR

Near-term (12-18 months)

- Retire or consolidate redundant and minimal value-applications
- Reduce infrastructure costs due to decommissioning apps
- Replace non-IT applications and processes with existing IT functionality
- Eliminate or consolidate software licenses
- Consolidate or virtualize hardware and software infrastructure
- Reduce costs and improve SLA-tocost values via managed services for non-core functions

Longer-term (>12 months)

- Retire or consolidate additional applications providing redundant functionality
- Eliminate, consolidate, simplify or automate inefficient or redundant business processes
- Reduce maintenance and support costs with increased reliability of modernized applications
- Increase agility with technologies that enable rapid change
- Reduce requirements for legacy application support in anticipation of a retiring workforce



CGI's approach to APR

Identifying rationalization opportunities requires a careful assessment that answers questions such as:

- What do I own?
- What does it cost?
- Where is there redundancy?
- Am I getting value?
- Is IT spent on the right applications?
- Am I using an optimal sourcing mix?
- Is application modernization needed?
- Can someone else do it for less?

Based on our extensive work on application rationalization projects in the public and private sectors, CGI has developed a proven APR assessment methodology. In as few as 12-24 weeks, our assessment can:

- Document the portfolio and identify the cost, business value and technical fit of each application
- Identify near-term and long-term opportunities to reduce support and maintenance costs by rationalizing the portfolio and other transformation initiatives
- Develop a detailed roadmap and business case for implementing the transformations.

In close collaboration with our clients, we pursue the following actions within each phase of the assessment, while focusing on alignment with agency program goals and IT strategy, as well as integration with current initiatives to optimize synergies:

Prep & planning

Define business/ application domains and identify stakeholders

 Determine staffing requirements and assessment schedules

Catalog/ inventory

- Design the application data dictionary based on requirements
- Review documentation and interview application teams and business executives
- Examine costs to operate, support and maintain each application

Categorize

- Determine the overall categories for grouping applications of like functionality
- Assign each application to a category

application: Retain, Retire, Replace, Renovate.

Evaluate/ recommend

- Identify the portfolio "end state" (based on strategies and technological direction)
- Assess each application's relevance to the end state
- Recommend actions for each Re-engineer

Cost & roadmap

Document

the costs

- and benefits and estimate transition costs Challenge and
- refine previously identified application costs
- Develop a detailed roadmap broken into phases

Business case

 Prepare a draft business case outlining the financial metrics (payback period, NPV, etc.) of the rationalization program based on an understanding of current state, end state and the gaps.

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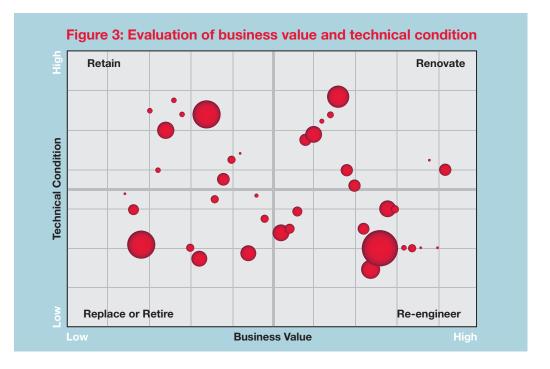
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Mr. Newstrom is responsible for the development of CGI's IT consolidation business program supporting U.S. state and local government and commercial clients. Prior to January 2011, he managed the organization responsible for CGI's U.S. infrastructure services delivery to more than 70 clients. With 32 years of experience delivering IT infrastructure services, his expertise spans all aspects of client service delivery, including computer operations, systems engineering, systems programming, network design and engineering and data center management. Additionally, Mr. Newstrom's knowledge encompasses all IT disciplines: mainframe, midrange, network and desktop/distributed services. Mr. Newstrom is well versed in the business aspects associated with client interfacing, client contract fulfillment and management, service offering profit and loss, revenue management and vendor engagement management. Before joining CGI, he led the EDS Corporation's travel and transportation delivery organization. Prior to EDS, Mr. Newstrom was a Vice President with American Airlines and Sabre Holdings where he was responsible for global delivery of infrastructure services to a vast majority of the world's travel agency community and a large number of the world's airlines using Sabre reservation and flight operations systems.

CGI's adaptive assessment process is based on understanding the agency's or department's specific priorities, challenges and objectives (i.e., move from legacy mainframe, cut costs, eliminate redundancy, refresh technology, etc.). This understanding coupled with the rigorous assessment of the application portfolio typically leads to the identification of increased cost savings opportunities in the range of 30 percent to 60 percent above other methods.

CGI's methodology provides visibility to each application's business value and technical condition. This knowledge enables rational business decisions to be made relative to the cost of each application and thus a prioritization of the sequencing of actions to be executed against the application portfolio. An example of the evaluation is shown in Figure 3, Evaluation of business value and technical condition

This evaluation becomes the basis for the application rationalization roadmap which, when executed effectively, provides the stated benefits to the organization.



Critical success factors

As with any complex effort affecting multiple stakeholders, steps must be taken to identify and mitigate risk. CGI has identified two critical success factors for APR initiatives: a rigorous and relevant assessment methodology and organizational change management.

RIGOROUS AND RELEVANT ASSESSMENT

The true cost and complexity of an application portfolio cannot be assessed without a complete picture of what is owned. In CGI's experience, organizations typically have 60 percent to 100 percent more applications than they think they have. The average application portfolio data dictionary uses about 20 attributes vs. the 50-65 that are truly necessary for achieving the desired results. A rigorous and highly relevant assessment methodology (such as defined above) must focus on the motivation for the project and comprehensively define the attributes required for decision making.

ORGANIZATIONAL CHANGE MANAGEMENT

While many view application rationalization as a technical exercise, we know from experience that technology is only about 30 percent of the equation. Close to 70 percent of the work is in understanding the business process requirements. CGI's organizational change management (OCM) approach provides the vehicle for securing executive sponsorship and stakeholder buy-in and providing the transparency necessary to establish trust. When stakeholders are asked to participate in the process, there is much less resistance.

CGI's five-step step OCM process includes:

- **1. Assess change**—Identifying the key business issues regarding the agency's or department's readiness and capability for change. Often cultural and bureaucratic processes supporting earlier practices must be relinquished; thus, it is important to identify the new relationships and processes, so plans can be made to facilitate the transition and reinforce new behaviors.
- 2. Align leadership—Ensuring agreement among program, agency and/or department heads about the vision and goals of the project. Aligning leadership requires agreement on the scope, nature and magnitude of change, on how to define and measure success, and on how leaders will work together to achieve the goals of APR. APR projects cannot succeed without leadership alignment, particularly when the roadmap requires organizational and business process changes.
- **3. Translate and communicate**—Establishing the approach and methods for communicating the planned changes, including training and strategies to keep both leaders and stakeholders aligned. APR can involve stakeholders representing enterprise architecture, IT governance, business process management and technology modernization. Leaders must communicate a consistent message—tailored to each stakeholder group and repeated as often as needed—regarding what the changes will be, how they will impact each stakeholder group and how they will be carried out. The latter point is crucial because organizations often become misaligned on how to carry out agreed-upon changes.
- **4. Execute plans**—Coordinating the execution of strategies for application rationalization and transitioning to new work processes while simultaneously performing day-to-day functions that support operations and mission activities. Change management workshops can help managers handle resistance and lead their teams through the transition stages.
- **5. Evaluate**—Assessing the project's progress and performance against the success model. Change is a dynamic process. Agencies and departments must remain flexible and open to course correction throughout the transition, using metrics, feedback from stakeholders and lessons learned to amend and improve the execution plan.



ABOUT THE AUTHORS



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William (Bill) Wilson is an Executive Consultant in CGI's Management Consulting Practice where he develops strategies that transform disparate and legacy enterprise IT systems into integrated, agile, web-based, customercentric IT architectures for large, complex organizations. As a senior IT Architect, Mr. Wilson analyzes the current state, mission and vision, develops transition roadmaps and plans enterprise IT architectures that integrate and align with client business strategies. Mr. Wilson has provided numerous application portfolio assessments and effective roadmaps for rationalizing those portfolios. His consulting clients have included several agencies of the Commonwealth of Massachusetts and States of Connecticut, Indiana, Maine and Rhode Island. He has also provided his expert consulting services to large financial services institutions and toptier global health insurers. During his career, Mr. Wilson has managed and delivered IT and product strategy and software development projects for multiple industries, including state government, healthcare payers and providers, as well as computer hardware, semiconductor equipment and financial services firms. Mr. Wilson holds an M.S. in Computer Science from the University of North Carolina at Chapel Hill.



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Conclusion

IT consolidation is a top priority for reducing costs in state and local government. While many efforts are focused on infrastructure consolidation, CGI has found that reducing application support costs and streamlining business processes can yield 4x greater savings than with infrastructure consolidation alone.

CGI has developed a proven methodology for APR that includes a rigorous assessment process aligned with organizational goals, as well as organizational change management to guide the transformation. CGI leverages our deep expertise in state and local government to define and capture the right data for good decisions and identify additional efficiencies and rationalization opportunities. We are adept at staying objective, recognizing the "urban legends" of application usage and challenging the status quo.

IT consolidation involves the interrelated disciplines of APR, data center consolidation, infrastructure consolidation and multisourcing services integration. CGI has developed competencies and best practices across all of these dimensions to help state and local governments realize the full benefits of their consolidation initiatives.

About CGI

At CGI, we're in the business of satisfying clients by helping them succeed. Since our founding in 1976, we've operated upon the principles of sharing in clients' challenges and delivering quality services to address them. As the world's fifth largest IT and business process services provider, CGI has a strong base of 68,000+ professionals operating in more than 400 offices worldwide. Through these offices, we offer local partnerships and a balanced blend of global delivery options to ensure clients receive the optimal combination of value and expertise required for their success. We define success by helping our clients achieve superior performance and gain competitive advantage.