

# Building High-Performance Enterprises in the Federal Government:

## A Proposal for Transforming Government Enterprise Performance Management

Mark Nelson  
 Managing Director  
 The Mercator Group  
 Enterprise Performance Management Institute

### Table of Contents

1.	The current-state of enterprise performance management and program execution in Government.....	1
2.	The current-state of Enterprise Architecture and Portfolio Management.....	2
3.	The current-state of Program Execution: Pay-and-Pray Model .....	4
4.	The IT Program (Throwing out the baby with the bath water).....	5
5.	Building a well integrated performance based enterprise.....	6
5.1.	Process Improvement: Enterprise Performance Management and SDLC.....	7
5.2.	Structural Improvement: A Service Oriented Enterprise .....	8
5.3.	Organization Change: A fundamental shift in culture.....	11
5.4.	Building a body of knowledge.....	11
6.	A government-wide Portfolio Planning Process .....	11
7.	Conclusion .....	11
8.	Footnotes .....	12
9.	Bibliography.....	12
10.	Web Sites.....	13

### **1. The Current State of Enterprise Performance Management and Program Execution in Government**

In the Federal Government Enterprise Performance Management arena, there is currently an alphabet soup of programs, initiatives, and techniques being employed to improve Department and Agency mission performance and help the Government become more responsive to the citizen. The alphabet soup, just to spell out a few of its ingredients, includes Enterprise Architecture (EA), Portfolio Management, Capital Planning and Investment Control (CPIC), E-Government, and the Program Assessment Rating Tool (PART). These initiatives and resources are geared towards breaking down and reducing the overlapping capabilities of the proverbial functional stovepipes that have long been recognized as inhibitors to effective enterprise performance by large bureaucracies, Government and otherwise. While all of these efforts represent sincere attempts to reform government, the irony is that each of these efforts is itself stove-piped or overlapping, and they are poorly integrated into an overall enterprise performance management capability. The lack of integration of these truly worthwhile efforts into a rational enterprise performance management process has resulted in a situation where none of the efforts can demonstrate a material impact on the Government performance outcomes they were designed to improve.

Compounding the problems with enterprise performance management planning and capital program selection processes is the continuing high failure rate of IT program execution. Similar to enterprise performance management, IT program execution has its own alphabet soup of techniques that are designed to fix some of the problems associated with the lifecycle management of complex IT initiatives. These techniques, similar to enterprise architecture, have their own merits. However, once again, to be effective, they need to be properly integrated into an overall enterprise performance management and program execution process. It does no good to adopt the latest iterative and agile software development lifecycle management practice if it will be married with a rigid and monolithic IT capital program selection and implementation process. One negates the other, and the desired effect will not be fully realized.

Unfortunately, the size and complexity of the Government enterprises result in a myriad of further complexities that, in many ways, dwarf those faced by commercial entities. Addressing these challenges requires each Government entity to integrate performance-based enterprise management with program execution processes. This is not to say that this process is implemented in the same way across Government, but that the process implemented at the Department and Agency level has built into it the characteristics that result in good planning, informed selection, and effective management of execution. Achieving these characteristics across Government entities will not be easy, given the level of cultural and organizational change required. However, much of the groundwork has been laid by recent efforts, which have sharpened the focus on the need for Government to move to a citizen-centric and performance-based mode-of-operation. This paper presents suggestions on how Government can achieve the status of high enterprise performance management by better structuring and integrating enterprise performance management and IT program execution into a seamless process in which the whole is greater than the parts.

## 2. The Current State of Enterprise Architecture and Portfolio Management

In 1996, Congress passed the Clinger-Cohen Act, which led to the requirement that Government entities develop and maintain up-to-date EA plans. The purpose of EA, as envisioned by Clinger-Cohen, is to create an organization-wide perspective on the current and future state of entity business functions and supporting processes, applications, data, technology, and security. This new perspective, in turn, would map to a EA Transition plan that would inform the CPIC process, and hopefully influence capital spending, reducing redundancy and improving cross-organization and Government interoperability and cooperation – commonly referred to as “breaking down the stovepipes.” Organizationally, responsibility for maintenance of the EA plans fell under the CIO.

More than eight years after the passage of Clinger-Cohen, any objective assessment of EA would have to find that EA has failed to achieve the goals originally set out for it. The most common reasons for EA implementation shortfalls may result from one of the following five problems:

1. EA was never more than superficially integrated into the Government CPIC process. It essentially became just another “paper exercise” in the budget process.
2. The EA frameworks adopted by Government (i.e., Zachman, Spewak) had their strengths in developing IT-centric enterprise descriptive artifacts, and lacked a more business-driven performance basis that would be required for an EA to be truly influential in a serious capital spend decision process.

3. The EA efforts were typically organized and funded along the same lines as the functional stovepipes they were designed to eliminate (e.g., organizations would create a Finance EA segment, an Acquisition EA segment, etc.). The net result is that the segmented EA plans tend to reinforce the stovepipes they were designed to remove.
4. There was no corresponding Government-wide organization change effort to support the movement to outcome-based management critical to the success of EA.
5. The EA efforts were too focused on the removing IT system redundancies and not enough on enabling the Mission. This, in turn, alienated the Mission personnel whose cooperation would be required to achieve any success.

While portfolio management is too early in its evolution in Government to develop any definitive analysis on its effectiveness, all indications are that it is suffering many of the same problems afflicting EA.

It is clear that both architecture and portfolio management, when properly implemented, are key components to a successful enterprise. For example, enterprises such as Dell, Intel, Toyota, IKEA, Coca Cola, and Wal-Mart have clearly been “architected,” and most make use of effective portfolio management techniques. Coca Cola implemented a portfolio management program close to ten years ago as a way of rationalizing its world-wide rollout of SAP, and it is still a key component of its IT capital planning process. However, what sets these organizations apart as enterprise performance management leaders is that both portfolio management and architecture are just additional aspects of a very effective performance-based and customer-centric enterprise performance management process that is backed by an ability to execute these processes and approaches. In the words of Michael Dell:

***“Just about anything in business can be either a sinkhole or a competitive advantage if you do it really, really bad or you do it really, really well.”***

***Michael Dell – August 25, 2003 interview in Business Week***

While EA and portfolio management have not been sinkholes for the Government, they have yet to be effectively integrated into an enterprise performance management process. As currently implemented, they are weakly integrated into a budget-centric CPIC process that leads to sub-optimized results. Exhibit 1 presents that process and outlines some of its problems:

As Exhibit 1 depicts, EA and other techniques, such as portfolio management, are weakly integrated into the CPIC process. EA typically enters the CPIC process more-or-less as a fairly ineffective filter to programs going through budget review. The net results are an ill-informed selection process and a lack of good program performance targets – resulting in a lack of accountability. Add to this the typical monolithic waterfall implementation, and, more often than not, problems with the program typically do not become visible until very late in the implementation process when attempts are made to integrate new capabilities into the existing environment.

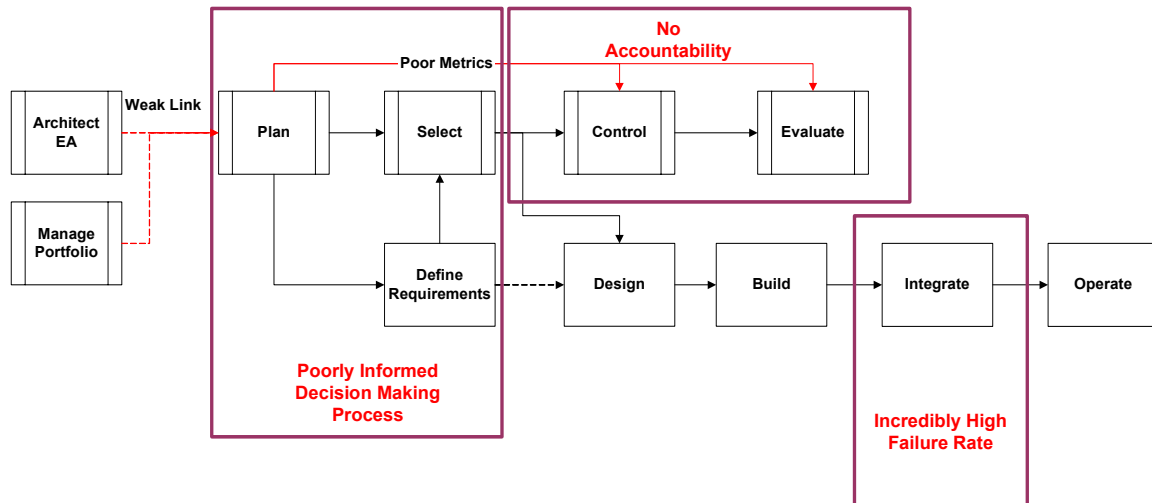


Exhibit 1. Weak Planning and Control Process

The problems identified above can be addressed by improving the integration of EA and portfolio management into the CPIC process, and maturing both into performance-based techniques for guiding enterprise management. This would have to be accompanied by an equally effective Government-wide organization and culture change effort. Next we address some of the issues with the equally important IT program execution process. Addressing the issues in both enterprise performance management and IT program execution is necessary if we are to capitalize on the foundation laid by EA.

### 3. The Current State of Program Execution: Pay-and-Pray Model

Let's say a financial planner approached you with the proposition that he could provide you with a very attractive retirement plan if only you would trust him with 8% of your salary over the next 30 years. The 8% would be put into a blind trust to be redeemable, along with all earnings from the Trust, at its maturity thirty years hence. Let's add to this scenario that you had prior knowledge that, statistically, 75% of these retirement plans fail, many leading to the total loss of invested funds. Would you invest in this plan? Unless you are an extreme risk taker, the most common answer would be "No." Yet this is, in fact, what Government Agencies metaphorically do all the time when they invest in monolithic, IT-based enterprise transformation efforts. The failure rate of these efforts is astronomical, but organizations still make bets on 100 million-dollar programs that require huge upfront capital investments that are, in effect, blind trusts. The money goes in, and no one knows what will "come out on the other side" until it is pretty much spent.

Examining the problem from a statistical point of view, as depicted in Exhibit 2, the data shows the following:

1. 80% of the money on any major program is spent before any meaningful feedback can be achieved<sub>1</sub>
2. 75% of the programs fail<sub>2</sub>
3. 47% of the originally identified requirements of the successful programs, or what gets implemented, are never used<sub>3</sub>.

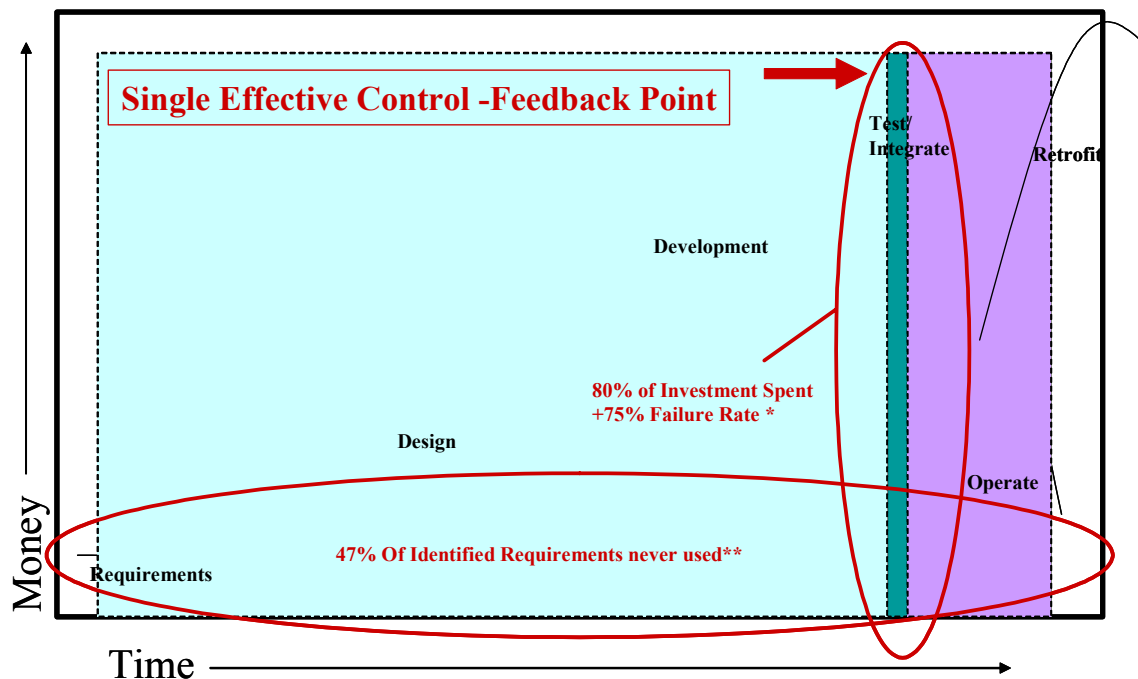


Exhibit 2. Failure profile of poorly integrated performance management process

#### 4. The IT Program (Throwing out the Baby with the Bath Water)

The creation of the Department of Homeland Security (DHS) from 22 disparate Government entities resulted in the inheritance of approximately 22 financial systems (the count varies based on the classification of what a financial system is) and a myriad of other resource management applications. It is clear that consolidation of these systems should be a good thing, and DHS has embarked on a program to accomplish this task. However, their approach, at a cost of hundreds of millions of dollars, is to build another suite of systems, not to consolidate around a subset of the existing systems and exploit the substantial investment already made in the existing assets.

Why not leverage the existing asset base of their financial and resource management systems and consolidate their operations? Given the tangle of stakeholder interests that reach all the way back to Congress, and the organization dynamics that they engender, building an entirely new capability (even with the 75% chance of failure) makes more bureaucratic sense than a seemingly more rational consolidation of existing systems. In the case of the DHS financial system consolidation, the actual consolidation approach would require cross-program and Departmental cooperation at a level never even reached in smaller scale Departments. After all, how do the capabilities for two sets of functionalities, whose lines-of-authority may actually extend back to separate Appropriation Committees in Congress, become seamlessly combined? Add to this the myriad of organizational dynamics required to get any program past the budget process, and finding the approach that works best is to get those on-board whom you need to get on-board with the program, and then how to build a wall around it. At the end of the day, when that IT program needs to be integrated

with the operational environment, the lack of cross-organization cooperation comes home in the form of failed integration efforts.

Building Government high-performance enterprises will require not only the implementation of enterprise performance management within the Department and Agency enterprises, but also the building of a Government-wide process that takes into account the dynamics of Congress and the Executive Branch. The challenges facing Government Departments and Agencies are not totally an internal execution problem, but are the result of the dynamics across the Government. The fix cannot be one that addresses one symptom or the other, but must address the whole body of symptoms. The difficulty in making EA or any of the other performance management initiatives a success is that, while all have merit, none of the initiatives addresses the complete span of complex processes and controls that together make up the Government enterprise performance management and program execution process.

## 5. Building a Well Integrated Performance-Based Enterprise

We will never completely escape the monolithic and rigid budget and acquisition processes that manage Government capital spending and make enterprise planning and IT program execution difficult. There will continue to be long and arduous budget and acquisition cycles. The budget process is a vital mechanism where Congress asserts its constitutionally mandated powers over the Nation's pocketbook. The deliberative nature of this exercise, as well as the size and importance of the tradeoffs that need to be made, ensure that the budget process is somewhat cumbersome and time consuming. Similarly, the stringent acquisition process is necessary to help ensure that the massive amount of money the Government spends is distributed in a fair and equitable way. Efficiency and effectiveness will always be secondary to these concerns. However, in a system where program managers can go to jail for spending as little as 1% over a legislated program's budgeted amount, while other managers suffer no negative effects for missing 100% of the funds for their program objectives, something must be done to remedy the situation. Additionally, we also need to address the incredibly high rates of program failure by building adaptive and agile processes and an IT infrastructure that will allow the Government to be responsive to continually changing taxpayer priorities.

EA has done a lot to raise the awareness of both the need for change and the potential for improvement. However, EA by itself cannot succeed, nor can relying on the magic of the latest technology. The lesson from the many well-run enterprises is that people, process, structure, and technology need to be effectively aligned with mission and business needs; that an agile infrastructure that can respond to change be put in place; and that management must be enabled with information that provides forward looking indicators of a changing environment. We believe that, despite the many obstacles in Government, world-class enterprise performance can be achieved through a sustained effort along several fronts:

1. **Government-wide Portfolio Management:** Implement a Government-wide portfolio management capability that provides a scorecard on key IT asset performance across Government and makes available a "pseudo-market" of high-performance assets for reuse.
2. **Process Improvement:** Truly enable and leverage the investment made in EA by expanding EA to encompass an overall enterprise performance management process that integrates both EA and portfolio management into CPIC. Complement this by developing

- an iterative SDLC process that can fully leverage service-component architectures and drastically reduce program failure.
3. **Structural Improvement:** Evolve the current organizational structure within Departments and Agencies to incorporate a mechanism for ensuring program effectiveness.
  4. **Organizational Change:** Implement an organizational change effort that promotes the embrace of performance-based management and rewards cooperation across entities.
  5. **Body of Knowledge:** Build a body of knowledge that includes realistic benchmarks that can serve as a basis for building both Line of Business (LOB) specific and Government-wide performance targets.

### 5.1. Process Improvement: Enterprise Performance Management and an Effective SDLC

There is no true process for enterprise performance management in Government today. While the CPIC process has good intentions, it does not sufficiently integrate either EA or portfolio management, nor has it been successful at promoting a performance basis to capital expense decisions. A successful enterprise performance management process would

1. Merge EA and portfolio management into the capital plan-select processes, and build a solid performance basis to capital spending decisions.
2. Manage the current IT asset base as a portfolio with continued performance targets and feedback.
3. Demand that major IT programs be fully modeled before green-lighting their development and/or implementation.
4. Hold program efforts accountable for interim milestones as part of the CPIC process.
5. Demand an iterative approach to delivery of capabilities and a fallback capability.

Exhibit 3 presents a high-level modified CPIC/SDLC approach that incorporates all of the above characteristics. This approach will not only result in improved alignment of operations to mission and business needs, it will also address the incredibly high failure rate afflicting major Government programs.

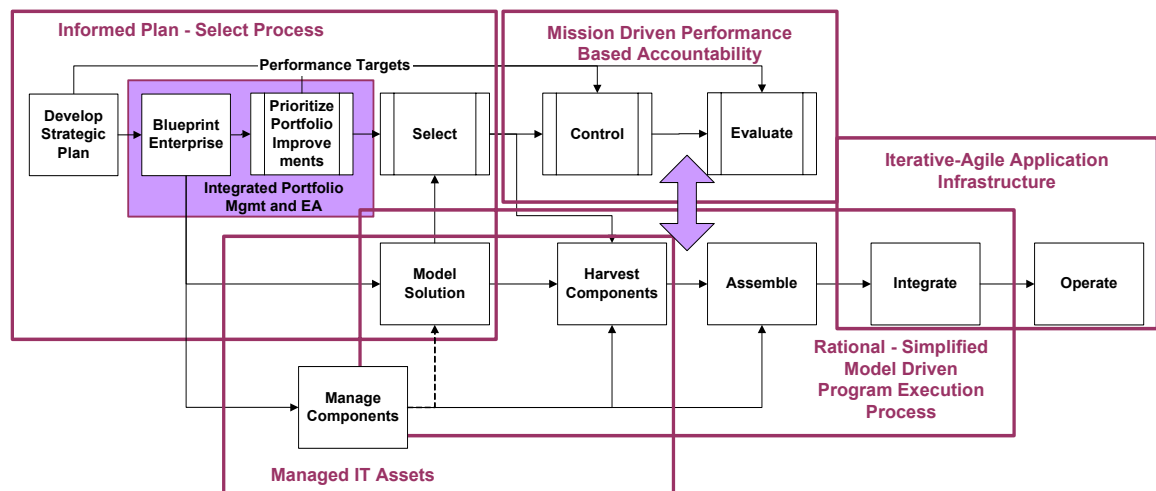


Exhibit 3. Effective high-level enterprise performance management process

As can be seen in Exhibit 4 below, in contrast to the “pay-and-pray” model presented in Exhibit 2, this approach provides multiple points in the deployment process where feedback can be obtained and appropriate adjustments made throughout the implementation. It represents an end-to-end integration of a performance-based enterprise management process with an agile IT program execution process.

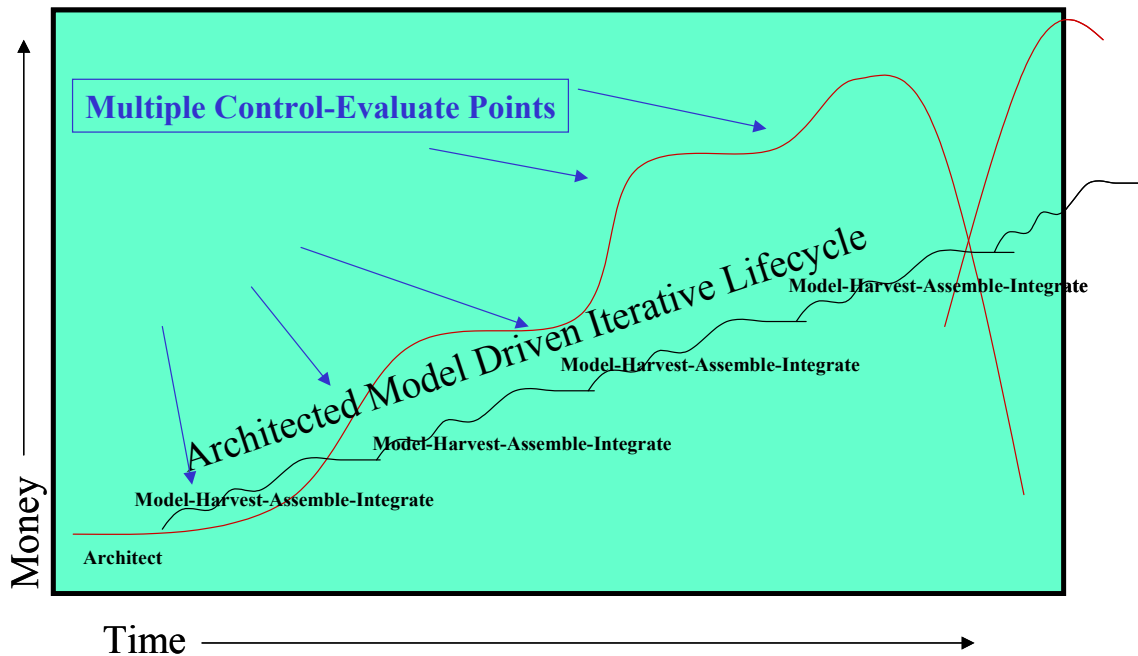


Exhibit 4. Iterative Program Execution with service oriented architecture

## 5.2. Structural Improvement: A Service Oriented Enterprise

The overwhelming focus in the program-centric budgeting and acquisition process is on how to manage the spending of allocated money with very little – other than some paper exercises – designed to manage performance. Under the current program-centric structure, too much emphasis is placed on the care and feeding of the program’s infrastructure, rather than the services the program is designed to provide. All too often despite their “bull in the china shop” characteristics, programs tend to take on a life of their own, and the “lets throw good money after bad” mentality seems to take over. What is needed is a Department and Agency organizational structure that can act as counter-balance to programs.

A possible approach is to have each Government LOB institute a service management layer completely independent of programs. The service managers would define the LOB services and their performance targets. A separate management structure would provide infrastructure program support, and programs would only be justified based on the extent that they support LOB services. Programs could even compete for business from the LOB services areas. Service managers would not have any stake in building up infrastructure, but would be rewarded based on their ability to achieve LOB objectives. Programs would be put on a



competitive basis with program managers rewarded based on the number of services they support and the satisfaction of their customer base. Both service and program managers would report back to Department and Agency executive management and to OMB and Congress.

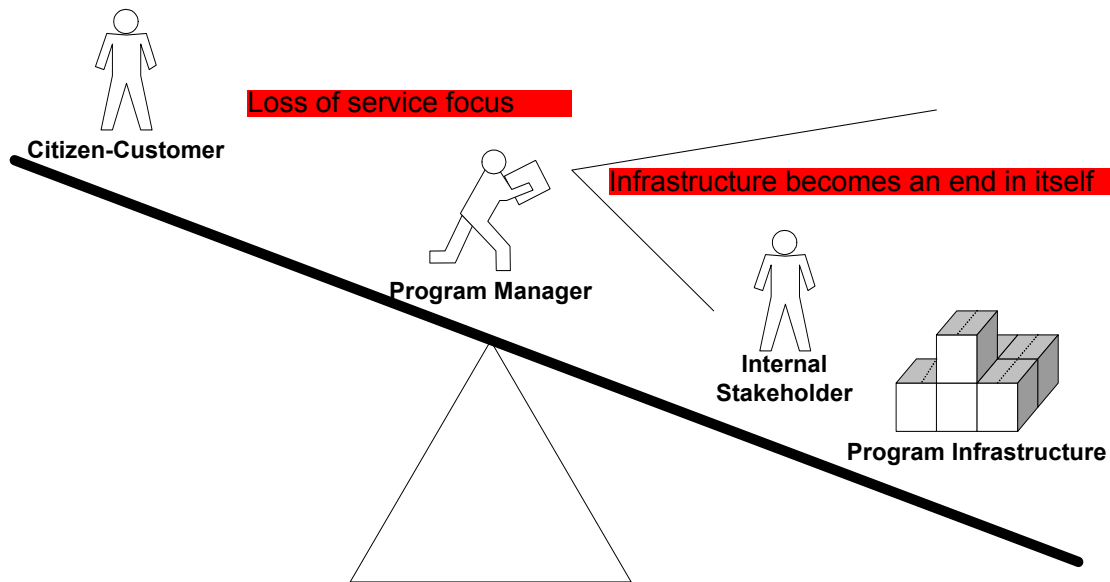
Regardless of the organizational structure put in place, there needs to be a fundamental change in the separation of concerns. The focus on delivering first class citizen-customer services too often gets trumped by an internal focus on a program's infrastructure and internal stakeholders. As contrasted in Exhibit 5, implementing a service management layer is one way of counteracting internally focused programs, and throttle out-of-control spending on non-performing programs.

### **5.3. Organization Change: A Fundamental Shift in Culture**

We have addressed many of the process issues limiting effective enterprise performance management and IT program execution in Government. We have briefly touched on some of the organizational structures issues limiting effectiveness. However, of all the issues influencing success in these areas, none is more important than organization change management. Successful enterprise performance management and IT program execution will require Government-wide adoption of a performance and outcome basis to measuring success and rewarding performance. This will require a huge cultural change in Government.

Both the OMB and GAO have made heroic efforts to push Government entities into adopting performance targets across a wide variety of activities. Their efforts have led to a high-level of awareness across Government on the need to move to a performance basis. However, a tipping point has yet to be reached. One of the problems is that there is not an objective basis for performance targets in Government, and Agencies have been asked to develop their own. This has led to much "hand wringing." A possible approach to moving the process forward would be to establish an independent body with cross-Agency participation to establish objective standards that are applicable across Government. This body could work with existing entities. Additionally, it could work to make the wide variety of industry-based metrics applicable to Government. This entity also could take on the role of organization change champion and could sponsor training and other organizational change efforts. One of the interesting phenomena across Government is that virtually all Departments and Agencies are experiencing the same problems implementing effective enterprise performance management and IT program execution. To date, the efforts to address these problems have been on an Agency-by-Agency basis. Would it not make sense to leverage the experience that can be gained from a cross-Government approach and address a common set of problems with a common set of solutions? Also, organizational change may be better achieved by addressing some of the issues outside of the comfort zone provided at the Department and Agency level. Possibly an independent entity working closely with Department and Agency management in concert with OMB and GAO could serve these purposes.

**Program-Centric Paradigm**



**The Service Oriented Enterprise -  
Balancing Customer-citizen needs with  
internal operational concerns**

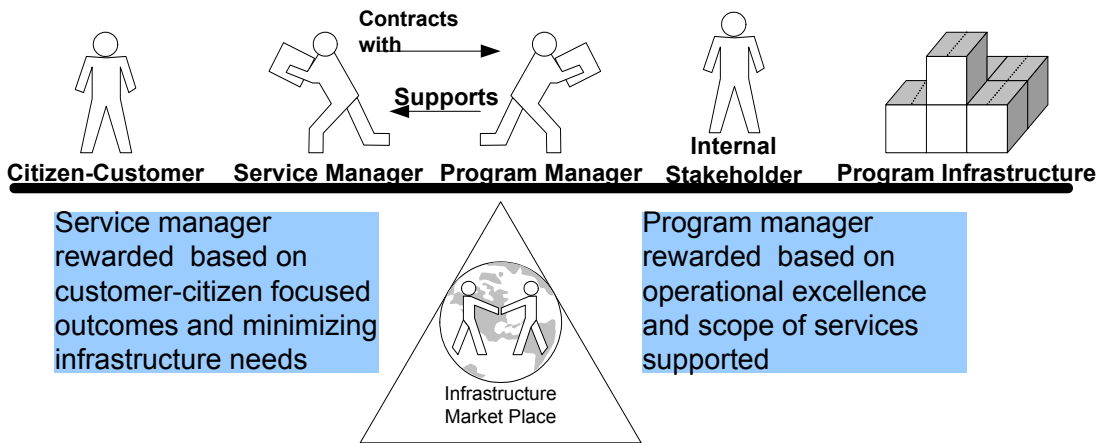


Exhibit 5. Program-Centric Vs. Service Oriented

**5.4. Building a Body of Knowledge**

When executives and engineers at Toyota Motor Company decided to build Lexus automobiles, they had a whole host of performance benchmarks that they could design. They knew the coefficient of drag for high-end sports cars and the tradeoff of horsepower, engine weight, and fuel economy. They could actually describe the car they were looking to build, based on a limited number of parameters; benchmark it against the industry; and align it to customer desires, wants, needs and willingness to pay. They also had repeatable processes that allowed them to build a first-class assembly plant and production value chain in under two

years. They knew which processes and supporting assembly line infrastructure traits would have to be improved in order to achieve upfront the more stringent design parameters of the Lexus, and they were able to make those improvements in parallel while building the assembly plant. In short, the people at Toyota had a proven body of knowledge to help guide them in the complicated task of essentially building an automobile company.

There is no corresponding body of knowledge of repeatable processes and benchmarks in Government. This puts the Government at a severe disadvantage in their effort to become more performance-based. Government executives need to be armed with a body of knowledge that they can use to guide and push their organizations to perform at higher expectation levels. In the absence of validated metrics, best practice information, and relative performance indicators, objective measures of performance will be difficult to achieve. While business has the ultimate arbiter of performance – the invisible hand of the free market – there is no equivalent in Government. The good news is that, in the market place of ideas, there are a wide variety of proven techniques to draw from. The challenge will be to adopt them to the special needs of the Government.

## 6. A Government-wide Portfolio Planning Process

One advantage that the Government does have in the area of performance management is that it has a large set of disparately managed assets that, if managed as a portfolio, could provide an internal “market” mechanism for assessing, evaluating, and prioritizing their use and ongoing capitalization. Assets that are evaluated highly, based on predefined portfolio criteria, would be candidates for reuse and continued capitalization. Assets that are evaluated poorly would be candidates for retirement. The Government could establish agreed upon sets of function-fit, quality, and cost criteria for evaluating Agency assets. Annual evaluations could take place to coincide with the budget process. The outputs of that evaluation could then inform the CPIC process as key input to prioritizing capital spends. Assets that rated highly would be promoted across Government. Program and asset managers would be evaluated on a single vetted set of evaluation criteria.

## 7. Conclusion

The Federal Government Community faces many challenges in its effort to evolve Government and Agency to become high-performance enterprises. Achieving this status will require a Government-wide sustained effort that addresses all aspects of enterprise performance management and program execution. The organization and cultural change issues are daunting. However, the problem seems to be repeatable and identical across Government. Creating a single set of reusable solutions to address Government’s enterprise performance deficiencies would be greatly effective across Government as a whole. Suggestions from this white paper include

1. Develop an integrated performance-based enterprise management process to be implemented across Government.
2. Implement a Government-wide portfolio management capability that provides: (1) for an objective set of benchmarks for asset performance; (2) a common basis for evaluating program and asset manager performance; (3) a market place for high performance assets and a mechanism for the retirement of poorly performing assets.

3. Move from a monolithic program execution model (pay-and-pray) to an iterative model that provides the necessary controls and feedback on program performance.
4. Build a body of knowledge in enterprise performance management.
5. Address the systemic structural issues that are major impediments to effective enterprise management.

The business process management and IT communities have tended to focus on a particular management craze or technology as the next Holy Grail. What we may have in front of us is the ability to make great things happen if we just focus on taking what already exists and better managing it. Michael Leavitt, of the Department of Health and Human Services, at a recent AFCEA conference stated:

*“We may be moving past the Information Age and entering the early stages of the Interoperability Era.”*

If we are to achieve this vision, we will need to improve our ability to deliver agile operational and IT infrastructure environments. Unlike in the past, where technology caused a lag in our ability to manage change, technology now is the leader, and our ability to conceive and manage technology’s potential is the laggard.

## Footnotes

1,2,3 – Taken from studies cited by: Larman, Craig, *Agile & Iterative Development*, Addison-Wesley (2004) – consistent with other studies done in this area.

## Bibliography

- Ahern, Dennis M., Clouse, Aaron, and Turner, Richard, *CMMI Distilled*, Addison-Wesley (2003)
- Carr, Nicholas G., “IT Doesn’t Matter,” *Harvard Business Review* (May 2003)
- Davenport, Thomas H., “Process Innovation,” *Harvard Business Press* (1993)
- Dickinson, Brian, *Creating Customer Focused Organizations*, LCI Press (2002)
- Frankel, David S., *Model Driven Architecture*, Wiley Publishing, Inc. (2003)
- Fukuyama, Francis, *The End of History and The Last Man*, Avon (1993)
- Gleick, James, *Chaos*, Penguin Books (1987)
- Goldratt, Eliyahu M. and Cox, Jeff, *The Goal*, North River Press (1984)
- Hammer, Michael, “Reengineering Work: Don’t Automate, Obliterate,” *Harvard Business Review* (July-August 1990)
- Hammer, Michael and Champy, James, *Reengineering The Corporation*, Harper Business (1993)
- Hay C., David, *Requirements Analysis*, Prentiss Hall PTR (2003)
- Kaplan, Robert S. and Norton, David P., *The Balanced Scorecard*” Harvard Business School Press (1996)
- Kaplan, Robert S. and Norton, David P., *Strategy Maps*, Harvard Business School Press (2004)
- Larman, Craig, *Agile & Iterative Development*, Addison-Wesley (2004)
- Larman, Craig, *Applying UML and Patterns*, Prentice Hall PTR (2002)

Magretta, Joan, "Fast, Global, and Entrepreneurial: Supply Chain Management, Hong Kong Style," *Harvard Business Review: Managing the Value Chain* (2003)  
Martin, James, *Information Engineering, Planning & Analysis*, Prentiss Hall (1990)  
McCaffery, Jerry L., and Jones, L.R., *Budgeting and Financial Management in the Federal Government*, Information Age Publishing (2001)  
Porter, Michael E., *Competitive Advantage, The Free Press* (1985)  
Shalloway, Alan and Trott, James R., *Design Patterns Explained*, Addison-Wesley (2002)  
Senge, Peter M., *The Fifth Discipline*, Doubleday (1990)  
Smith, Howard and Fingar, Peter, *Business Process Management*, Meghan-Kiffer Press (2003)

### **Web Sites**

[www.bpmi.org](http://www.bpmi.org)  
[www.businessprocesstrends.com](http://www.businessprocesstrends.com)  
[www.codegeneration.net](http://www.codegeneration.net)  
[www.eidx.org](http://www.eidx.org)  
[www.industryweek.com](http://www.industryweek.com)  
[www.tutor2u.net/business/strategy/mckinsey\\_pyramid.htm](http://www.tutor2u.net/business/strategy/mckinsey_pyramid.htm)  
[www.omg.org](http://www.omg.org)  
[www.quickmba.com/strategy/value-chain/](http://www.quickmba.com/strategy/value-chain/)  
[www.sei.cmu.edu/sei-home.html](http://www.sei.cmu.edu/sei-home.html)  
[www.software.org/pub/architecture/fwhome.asp](http://www.software.org/pub/architecture/fwhome.asp)