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Technology Leadership in the Public Sector

Performing to Expectations

Many government CIOs are tackling performance management, but few take a strategic perspective.

By Bill Flemming
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Nearly 70 percent of IT departments still don't have enough trust from their organizations to become strategic, respected partners – most are still simply taking orders, and do not fully collaborate with their government counterparts, according to Gartner.

When public-sector CIOs try to articulate IT costs, services and benefits in relevant business terms, the result often dissatisfies agency executives and application users. Their frustration can be summed up in one question: What value does IT *really* provide?

One reason agencies question the value of IT is the difficulty in linking agency objectives and strategy to IT investments, services and financial performance. In many organizations, agency and IT sit on opposite sides of a chasm. On one side, executives and planners create and link organization strategy with agency objectives, and then expect IT to meet expectations at a cost and level of service that achieves agency mandates.

On the other side of the chasm, IT creates and delivers services and technologies that often miss the mark. The chasm grows when IT is unable to document results – successful or not – for the agency.

With the stakes so high in government these days, why hasn't the problem of alignment between agencies and their IT departments been solved?

Public CIOs can play a crucial role in implementing IT strategic performance management – an essential tool for managers aiming to provide the information and accountability expected of them, according to **NewPoint Group Inc.**, a management consulting firm based in Sacramento, Calif. Strategic performance management builds on an organization's core strategies to identify a balanced scorecard of performance metrics that will promote the achievement of agency goals, and provide direction and commitment for future success.

While public CIOs can be key in implementing IT strategic performance management, they also face the challenge of managing IT data. IT exists in a sea of dissimilar infrastructure components and technical processes. To keep components functional, technical skills are grouped by infrastructure type.

One must also understand that CIOs face unique performance management challenges of their own. To show they are meeting current and future strategic visions and mandates, CIOs must collect and report on tons of disparate, dysfunctional IT data – host, Web, network, security and storage performance data from Mainframe, UNIX variants, Windows, Linux; and data from internal and external outsourced entities.

The different technical backgrounds of IT and management staff create additional challenges. This data must then be analyzed and correlated, from which CIOs must quickly and accurately answer important strategic questions like:

- Do I need to redistribute workloads?
- Which URL got the most hits this quarter?
- Can we support current growth?
- Are we meeting our service level objectives?
- What is the trend for various performance measures over time?
- How do I isolate resource utilization by application, user or network?
- What effect did the current marketing campaign have on our Web activity?
- What was the average response time for customers accessing my Web server?
- How can I better troubleshoot service degradations before they turn into outages?

As IT data exists in this sea of dissimilar infrastructure components, technical processes and skill sets — access, proper interpretation and presentation of IT data are often splintered and rendered useless.

As a result of the siloed data, information about the infrastructure is often “trapped,” and provides little intelligence. IT service and management processes are often ad hoc, which makes responses inefficient and error-prone, resulting in higher costs, messy data, reactive service processes and poor alignment within IT.

When raw data about IT infrastructure performance is embedded within technology silos, intelligence is limited. Without the ability to link infrastructure to areas such as agency objectives and planning, measured results, service levels, and financial results, CIOs must operate blindly. If the disparate data is not consolidated, CIOs have no foundation from which to create and exploit strategic performance management.

Strategic performance management provides the basis for aligning agency objectives with outcomes; forecasting results; and optimizing infrastructure, services and financial results. Strategic

performance management links technology silos, service processes and financial data for seamless performance. Most of all, strategic performance management provides the hindsight to review and communicate accurately what has happened, the insight to ascertain why it happened, and the foresight to let IT optimize technology’s impact on the organization.

Reaching Maturity

CIOs also struggle with IT process maturity, a key indicator of IT improvement. IT frequently doesn’t help to align service level management, financial management or capacity planning with each other, nor does it align those three things with strategic goals. IT shops historically work at the low, nuts-and-bolts level, not a business-centric level, which requires more maturity. As a result, service level agreements (SLAs) are defined without direction, strategic goals or objectives.

Where SLAs do exist, they have often been negotiated with the wrong people. Agreements with end-users — rather than strategic decision-makers — usually result in a tactical situation rather than a strategic one, which prevents IT from being as cost-efficient as possible. Agreements are measured and met, but agency requirements are often missed.

While the biggest technical barrier to reaching IT maturity is the disparate data problem, the biggest organizational barrier is the absence of three components: a well thought-out strategic model, a communication strategy and senior management support.

Two-Pronged Approach

Many CIOs find it a daunting task to move an entire IT department along the process maturity scale without negatively affecting service and raising costs. To make this move successfully, CIOs must drive strategy through strategic performance management.

Moving up the maturity scale involves more than a bottom-up approach — aimed directly at already-implemented agency applications. Without a similar

top-down approach — aimed at building applications from scratch — for new IT capital investments to meet agency requirements and enable IT value, CIOs would perpetually build IT solely from the bottom up. This is not a good idea because resources, time and money would go toward projects and activities disconnected from, or not aligned with, the overall strategy.

CIOs must direct a two-pronged, balanced approach of both the bottom-up and top-down approaches to improve IT maturity with strategic performance management. Also called legacy applications, many are already implemented but without business cases, ROI calculations, SLAs or business service models.

As such, legacy applications are the focus of reactive processes and consume huge portions of an IT budget. The maturity direction is bottom-up, but the strategy directing the change is top-down.

While building the foundation to support the maturing processes, a CIO must formulate strategies to capture and measure value requirements of new IT application investments. Formulated properly, the requirements provide the ingredients to calculate financial measurements, SLAs and capacity needs prior to implementation. The requirements must give forecasts of volumes of transactions for benchmarking after implementation.

Nuts and Bolts

Because IT strategic performance management plans and measures include complex, technical strategy, CIOs need a comprehensive set of IT intelligence tools. Every undertaking has a beginning, and strategic performance management starts with a “balanced scorecard.”

The balanced scorecard is a strategic management framework and methodology developed by Robert S. Kaplan and David P. Norton, co-authors of *The Balanced Scorecard: Translating Strategy Into Action*. Scorecards are organized by strategy, perspectives, objectives and key performance indicators. A scorecard

software environment contains multiple scorecards that cascade from top to bottom throughout the organization, helping to align performance with the business side of an organization. Multiple scorecard levels are created to group each individual department and its processes. Scorecards are also organized into four perspectives – customer, financial, learning and growth, and internal – to help build the two-pronged approach, or dual strategy. Each perspective enables IT to achieve a level of maturity.

Within the *customer* perspective, CIOs can bridge the chasm between IT and agency by being more customer-focused and meeting customer expectations.

The *financial* perspective also helps cross the chasm by meeting financial accountability. All too often the lack of financial results contributes to agency dissatisfaction or IT's inability to manage itself effectively. The /learning and growth/ perspective initiates new skills and technologies necessary to fuel internal changes in the fourth perspective, the /internal/ perspective, which drives the initiatives that will allow IT to move up the maturity index.

The **customer** perspective has the following three initiatives that are supported by objectives and measures to help accomplish them:

- communicate clearly and effectively to the agency via strategic performance management;
- utilize business cases, ROI and objectives for all IT capital expenditures; and
- create post-implementation IT service and financial balancing.

The **financial** perspective's two initiatives are supported and accomplished by objectives and measures to help accomplish them:

- demonstrate IT value via activity-based management; and
- align and measure agency IT financial requirements.

The **internal** perspective consists of the following four initiatives that are supported by objectives and measures to help accomplish them:

- integrate data into a single IT intelligence platform;
- move IT from a reactive to a proactive process;
- implement service level management; negotiate, guarantee, monitor and report agency SLAs; and
- demonstrate IT value to the agency.

The **learning and growth** perspective is a key enabler of the internal initiatives. The information technology infrastructure library provides two key elements that support the learning and growth initiatives: measurable and repeatable processes, and effective and efficient processes.

In the Driver's Seat

Trying to give an overview of complex strategy can cause omission of key details. The nuances of IT strategic performance management are revealed in each initiative's objectives, which specify what the balanced scorecard initiatives will be driving. The objectives will create – with the proper tools and methods – four optimization suites, which are designed to address the critical areas of IT maturity, support and management processes. Optimization not only moves IT up the maturity scale, but also allows IT to sustain the progress achieved. The four suites are resource optimization, service optimization, financial optimization and performance optimization.

Resource optimization highlights infrastructure performance problems; correlates performance events across infrastructure domains by looking at the problems holistically and how they affect different areas; uncovers repeating patterns of degraded performance; and generates capacity forecasts, planning and management.

Resource forecasting is a key objective in moving IT toward proactive maturity. It reduces costs by eliminating panic buying, and provides stability with planned changes and upgrades. Resource optimization is the beginning of the process maturity journey.

Service optimization measures the infrastructure's availability, response time and production over a period of time both at the component level and at the logical model level; monitors, manages and reports service level results; builds and reuses logical models; adds information to furnish results to the customer and to manage IT; measures the performance of business application models and standard service offerings; isolates performance issues; and links to financial optimization to further optimize IT performance.

Service level management captures the terms of the service contract. If IT is negotiating a contract for a new service that hasn't been implemented, the information is passed to capacity management – a function of resource optimization – to plan the infrastructure needs for the new service. If IT is moving up the process maturity scale, the contract details will be evaluated upstream through financial optimization.

Financial optimization glues resource and service optimization together; involves activity-based management, which produces the cost of both resource and service optimization, completes the picture and helps IT users compare actual and expected results; measures the performance of IT SLAs against agency financial goals; provides IT financial performance models that answer what the cost of an IT service – the cost of an SLA – is; focuses on IT's largest investment – human capital; calculates total cost of ownership and pinpoints excessive costs; and answers the following questions: Why are we spending the money? How much do we have to spend? How much and how fast are we spending? Where are we spending the money? And how can we improve financial performance?

Performance optimization builds and tracks IT strategy devised to implement a maturity model and deliver value to the agency, and offers foresight for the next steps in the evolution of IT strategic performance management.

Everything Ties Together

IT enables business activities to be performed with speed, efficiency and accuracy, using the intelligence of disparate, but related, information that has never before been available. These benefits fully justify the sometimes overwhelming complexity, extraordinary cost and uniquely qualified personnel necessary to maintain the IT infrastructure. To deliver this competitive edge, the value of IT must be financially transparent and justified; the contribution of IT services – and the quality of those services – must be governed and aligned with each line of business; and the operational efficiency of IT must be measured and managed.

To satisfy these objectives, public-sector CIOs need a single, cohesive performance management system capable of analyzing IT in terms of financial cost, business value and the operational efficiency by which IT services are delivered. Developing a strategic performance management system within an organization helps CIOs to accurately review and communicate happenings between IT and the agency, and gives them necessary tools to optimize technology's impact on the organization through IT.

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