

Meeting the Challenges of the Modern CIO

by

Darrin London, PMP

london_darrin@bah.com

Daniel E. Williams, PMP

williams_daniel_2@bah.com

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Meeting the Challenges of the Modern CIO

Introduction

In many Chief Information Officer (CIO) organizations, there is a perception by customers that CIO capabilities can be very limited. In these types of environments, information technology (IT) is viewed more as a cost than a strategic investment. In these cases, customers may only work with the CIO organization for network issues or email problems. To the customer, the CIO may meet their expectations in dealing with an issue but falls short in providing continuous strategic value. However, the modern CIO can take a lead role in changing that limited perception, moving the organization toward fully leveraging IT to provide real strategic value to the enterprise.

The Office of Management and Budget (OMB) recently released a memo giving all federal CIOs authority in governance, commodity IT, program management, and information security. Based on this memo, CIOs are expected to play a major role in leading the effective implementation of IT across their agencies. However, there can be numerous challenges in making this a reality. In today's environment, budgets are being significantly cut across the federal government. This puts increased pressure on CIOs to explicitly justify IT costs (both current and future). Additionally, CIOs must clearly demonstrate how the office of the chief information officer (OCIO) provides value to the organization. Given this realization, CIOs must be able to advance the perception of IT within their organization. The following sections describe short term and long term strategies that CIOs can implement to drive the effective management of IT and support agency missions.

Challenges Faced by the Modern CIO

CIOs face a unique set of challenges that are both similar and dissimilar to that of many C-level executives. In addition to running the business of IT, CIOs must also drive the direction and implementation

of technology within the organization. As seen in Exhibit 1, the CIO must simultaneously meet the current, basic IT needs of the business, plan for future growth, and adjust to changes in technology. This requires expertise in areas encompassing both IT and service delivery including the following:

- Disciplined project and program management
- Operations support
- Innovation management
- Customer service
- Understanding of finance and budgeting
- IT governance.

Exhibit 1 | CIO Services



Source: Booz Allen Hamilton

Customer Perceptions

The way CIOs handle these challenges depends on how customers within the business view IT and its role in the organization. Exhibit 2 shows a Basic Strategic Framework along with the characteristics and customer perceptions within each level.

- **Level 1 – IT is treated as a cost.** In this type of organization, technology investments are kept to a minimum and the real benefits of technology are not typically sought or expected. Additionally, the CIO is not directly involved in strategic planning for the organization. As a result, IT is in “maintenance mode,” ensuring that the business units have telephone, email, and Internet, at a minimum. In many cases, IT is charged with maintaining an intranet platform, such as SharePoint or some other commercial off-the-shelf (COTS) solution. The goal in this organization is simply competitive parity.
- **Level 2 – IT is recognized as a competitive asset, but no real strategic management is in place.** In this type of organization, IT innovation is pursued in an ad hoc fashion. However, management and business customers recognize the benefits

of IT to the organization and consistently focus on technology innovation. In addition, this IT organization seeks to enhance the overall business advantages through incremental development and custom or semi-custom technologies.

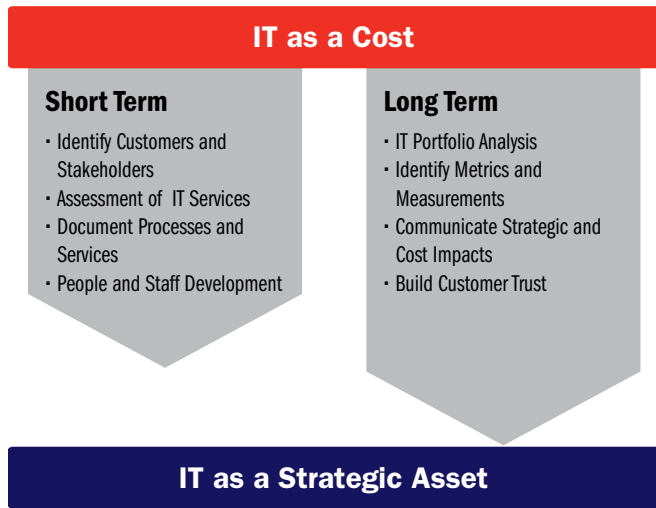
- **Level 3 – IT is fully integrated into the strategy and operations of the business.** The IT department is directly involved in the overall strategy of the business. The IT managers are both technology-savvy and strategically-focused. Business customers rely on the organization to provide not only basic IT services, but also guidance and input into corporate initiatives. This type of IT organization brings together business leaders, customers, and suppliers to proactively develop solutions.

For the purpose of this paper, we will focus primarily on the Level 1 IT organization and strategies to gradually change the perception of business customers from a cost center to a strategic asset. Let’s now take a look at some of the short and long term strategies the CIO can use to migrate from being treated as a cost to being recognized as a strategic asset within the business (See Exhibit 3 on the next page).

Exhibit 2 | Basic IT Strategic Framework

Perception of IT within the Enterprise		
Level 1	Level 2	Level 3
<ul style="list-style-type: none"> • IT treated as a cost • Organization conforms to IT • Benefits not sought • Benefits not expected • Goals is to maintain competitive parity • COTs are first option 	<ul style="list-style-type: none"> • IT recognized as a competitive tool • Customers and user focus • Competitive barriers and functional benefits pursued ad hoc • IT is constant, incremental, and evolutionary • Goals focused vertically • Do not try to create industry standards • Customized/semi-customized IT • Firm-specific advantages 	<ul style="list-style-type: none"> • IT fully integrated into overall business strategy, operations and organization • Managers are IT savvy and strategy-focused • Creation of functional benefits and competitive barriers is pursued systematically and proactively • Suppliers and customers are strategically involved • Developing and controlling industry standards affecting the competitive environment is an explicit goal • Customers and suppliers are encouraged to make firm specific investments • Highly customized limiting emulation

Source: Booz Allen Hamilton

Exhibit 3 | Short and Long Term IT Strategies

Source: Booz Allen Hamilton

Short Term Strategies**Identify Customers and Stakeholders**

For a CIO, one of the first key steps in moving toward becoming an effective organizational entity is identifying the customers and stakeholders, as well as their goals and objectives. At a minimum, this should include the overall organizational goals and objectives. However, it is also beneficial to look at some of the underlying entities within the organization and any external partners. What keeps these customers up at night? What are they responsible for delivering both near and long term? Documenting this information first and validating it with customers will ensure any future initiatives are aligned appropriately and provide a strategic value for the CIO organization.

A sound understanding of stakeholder needs provides the input necessary to construct an effective communication plan. An effective communication plan will help customers understand current CIO strategies and initiatives. The OCIO can then begin to advertise services and capabilities aligned to those customer needs. This could be as simple as providing a monthly communication on recent CIO accomplishments and how those accomplishments are helping customers

achieve their mission. This type of communication can have a positive impact on the perception of the CIO organization and will help to further build its identity as a trusted strategic partner. It is important to ensure customers hear about the CIO in a positive light instead of only when there are IT-related issues.

As the office matures, feedback should be gathered from customers on their perception of the CIO and how the office contributes toward meeting their business goals and objectives, if at all. As a starting point, it may be best to perform a self-analysis on current customer perception and what may have been done well in past engagements. Some information to consider during this analysis includes the following:

- Determining which projects have been done well and root cause(s)
- Determining which projects have not done well and root cause(s)
- Describing projects and their alignment to organizational goals, as well as customer specific goals.

Documenting and analyzing each of these data points will provide valuable insight and lessons learned in executing high performing engagements in the future.

Assessment of IT Services Offered

Based on the documented organizational goals and objectives, as well as key customer needs, the next step is to align those with OCIO service offerings. A good starting point is the development of a list of services provided by the current CIO organization. The list should be created collaboratively across the organization, including IT managers, engineers, project and program managers, and senior managers. As discussed earlier, input from current customers should also be gathered to determine the impact and quality of the service listed. This aspect will help senior IT leaders organize the services into a cohesive, but interrelated IT service catalog (See Exhibit 4 on the following page).

As the current services are documented and aligned, there may be services being performed that do not

provide significant value to the organization. Through this process, a validated, mission-oriented service offering portfolio will be developed. Each service offering should then be aligned to the various branches within the IT organization. At this point, each branch can further define their service offerings, including specific roles and responsibilities, policies, and procedures required for customer engagements.

As a next step, the organization should begin to provide a cost structure for each service offering. The structure should be scalable enough to provide rough order of magnitude (ROM) costs based on an IT initiative's size and complexity. When developing this structure, it is important to dissect each service into smaller, more defined tasks and build costs from the bottom up. In addition, through this process, the organization will gain insight into the resources required to perform these services and can more effectively justify future budget requests. Based on current and future resource levels, the organization can then begin to understand their project capacity and effectively prioritize IT initiatives based on strategic value. Building a mature chargeback model from the

ground-up can be a long process. However, some short term progress can be made by clearly defining the services offered to the organization. Further build out of a full chargeback model will be discussed in the long term strategies.

People and Staff Development

Once customer challenges have been identified and an assessment of IT services is cataloged, the CIO can now turn their attention to staff and people development. This step requires an analysis of any gaps between client needs, current IT services, and staff skills that exist within the organization. The strategies available to fill these gaps are numerous, but include the following:

- Strategic training in areas critical to the organization and key customers
- Systematic capture of project and program lessons learned
- Information sharing and collaboration systems
- Continuous knowledge capture at all levels of the organization.

Exhibit 4 | Alignment of OCIO Services



Source: Booz Allen Hamilton

These areas will strengthen the ability of the IT organization not only to deliver critical IT services, but also to uncover areas of service innovation through conversations and interactions with stakeholders and customers. As with other areas of IT delivery, metrics are critically important to ensure optimal levels of satisfaction for current services. These metrics can then be analyzed to uncover new service areas that customers have not identified but will make their jobs more efficient and effective at achieving the organization's mission.

Documenting Standard Policies and Procedures

Once the IT services have been identified and documented, a thorough review of policies and procedures should be initiated. This review will uncover actual, perceived, and hidden activities that occur daily within the IT organization. Any policies or procedures that do not directly contribute to the successful implementation of IT services should be eliminated or reviewed more thoroughly to determine the true value to the organization's goals. Once the policies and procedures have been defined, articulated, and documented, the IT service catalog is ready to be shared across the organization. This step ensures customers and agency leadership fully understand the following:

- How can the CIO support me in carrying out my goals?
- How much will engaging the CIO affect my budget (both near and long term)?

Communicating these points clearly is an important step in moving any IT department toward becoming a strategic asset within the business. This list of services will define how the IT department is perceived and what customers can reasonably expect from the IT department. The service catalog also serves as a starting point for service level agreements (SLA) and a standardized project management template for estimating service tasks.

Long Term Strategies

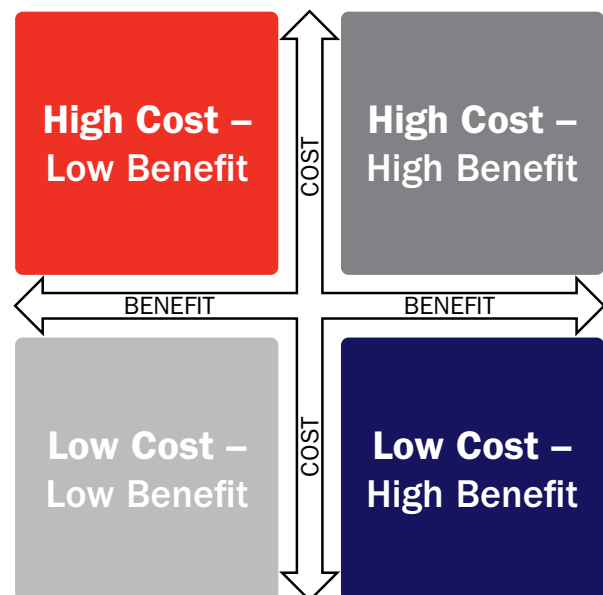
IT Portfolio Analysis

After the IT service catalog has been developed, the IT manager should focus next on analyzing the organization's IT portfolio. An IT portfolio analysis asks the following questions:

- Does this project contribute to the overall mission of the organization?
- What IT services are provided in this project?
- Are there additional services provided by this project that are not defined in the service catalog?
- Does this project follow the IT policies and procedures defined for the organization?
- Who are the customers?
- Is there an SLA in place?
- How is the project being measured (cost, schedule, scope, and quality)?

This is not a complete list, but illustrates the types of questions that need to be answered (See Exhibit 5).

Exhibit 5 | IT Project Analysis Chart



Source: Booz Allen Hamilton

The benefit(s) of each project must be clearly defined in relation to organizational objectives and the cost of implementation. Exhibit 5 shows the template which can be used to assess the effectiveness of each project. IT portfolio analysis shows the CIO whether the project is high-cost with low benefits to the organization (not good) or low-cost with high benefit (great, but unrealistic in most cases). For each benefit (or value) identified, accompanying goal-specific metric(s) must be defined. For example, if a new system is required to enable collaboration across multiple divisions, the benefits or success criteria of the system must be fully documented in quantifiable terms. Examples include decreased time to find a specific intelligence report or decreased cost of onboarding for new employees. This ensures that stakeholders will have the flexibility and insight to properly evaluate the strategic benefits of the initiative and make decisions based on quantitative information.

IT Measurement and Metrics

Once the benefits and risks have been identified and quantified, and project metrics have been determined, alternative solutions must be evaluated and reviewed against the proposed solution. This step is critical to ensure that duplicate efforts and initiatives are avoided. As a result, the organization will be able to shift financial resources and staff elsewhere. During this era of fiscal accountability, thorough due diligence is key. It helps the organization make sound IT investment decisions, while delivering the systems and information that staff and other stakeholders need to perform their functions both efficiently and effectively. In addition, with this information now gathered, true total cost of ownership (TCO) analysis can be performed enabling an apples-to-apples comparison of potential IT alternatives.

Stakeholders must continuously monitor and review metrics to identify trends and “calibrate” business and IT strategy. This enables a more nimble organization which can adjust to changes in priorities and operational landscape. Metrics are a necessary tool to both management and the organization as a whole, combining quantifiable data with operational

experience. The institutionalization of new processes (through change management, communications and outreach) is about creating a group of strong supporters and getting stakeholder input and buy-in from the start.

Chargeback Capabilities

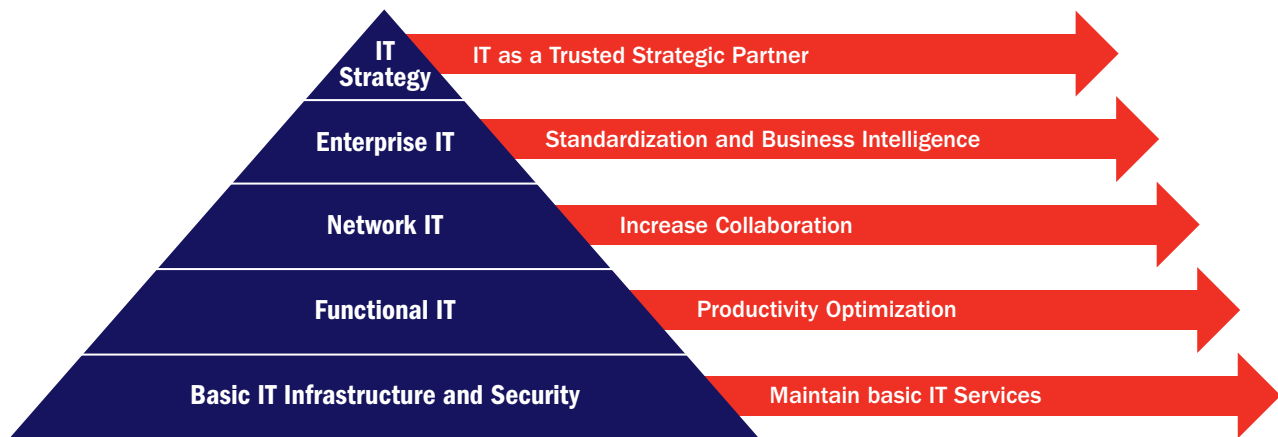
The ability to accurately assess cost will allow the CIO to recoup those costs through chargeback and cost allocation. This capability enables IT managers and organizational customers to see what services are provided by the IT department and at what cost. The primary benefit of chargeback to the IT department is a true accounting of how IT resources are used through the organization. The groundwork laid up to this point (service catalog, cost identification, IT portfolio analysis and IT metrics) enable the IT manager to discover the TCO of services, software, and hardware. In addition, the IT manager can allocate those costs across the customer base over a defined time period.

Once the cost and metric information has been gathered and documented, a chargeback strategy can be developed. The strategy could be very simple, such as a flat fee per service, or as complex as a consumption-based model. Whichever methodology is employed, it must be clear to the customer what they are being charged, what services are being provided, and how those services are monitored and measured.

In many cases, the IT department is unable to actually charge or allocate costs to internal customers. The reasons for this vary but include corporate policy, unfamiliarity with chargeback, or even lack of trust.

Building Trust

In its most simplistic description, the IT department is responsible for providing basic IT infrastructure and security for the organization. If these basic services are not adequately provided or the business users perceive the services are of poor quality, moving up the pyramid will be nearly impossible (As shown in Exhibit 6 on the next page).

Exhibit 6 | Alignment of OCIO Services

Source: Booz Allen Hamilton

Basic IT consists of network connectivity, email services, firewalls and other security services. Once these services are in place, IT is essentially invisible to the everyday business user or knowledge worker.

Functional IT consists of office productivity software such as Microsoft Office™, Outlook™, or Project™. These solutions focus on increasing the productivity of knowledge workers across the organization.

Network IT builds on the progress up to this point and enables collaboration and information sharing capabilities. Examples of Network IT include document management portals, custom social business platforms, and knowledge management portals.

Enterprise IT continues the increase in complexity. Much of this complexity is due to policy and the necessity of change management to focus on resistance to new technologies and changes to the status quo. Examples of Enterprise IT include business intelligence solutions, decision support systems, and time-tracking solutions.

Once these systems are in place, the CIO can focus on strategic IT issues and how IT can increase the organization's competitive advantage. This sound IT foundation also frees the IT department to execute the CIO's vision with a singular focus, uninterrupted by constant "fires" that plague many IT departments.

Conclusion

As organizations move forward in achieving their missions, a CIO can play a large role in the success. However, a CIO organization that takes on too much, too soon can lead to unfavorable consequences and potentially further damaging its perception by customers. The goal of becoming a strategic asset to the enterprise cannot happen overnight and should be thoroughly mapped out in a five year strategic plan. However, having a clear vision of the end state and instituting short term strategies to initiate the process will enable incremental successes. These strategies include the following:

- Identifying customers and stakeholders
- Assessing IT services offered
- Documenting standard policies and procedures.

As the CIO organization matures, the following long term strategies can also be implemented:

- Performing an IT portfolio analysis
- Identifying metrics and measurements
- Building customer trust
- Communicating strategic and cost impacts.

No doubt there will be challenges along the way as the CIO organization attempts to shift the perception from just “keeping the network up” to providing significant strategic value. In the end though, the CIO will be better equipped to build credibility across the organization by focusing on efficiencies and supporting the accomplishment of the agency’s mission.

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About the Authors

Darrin London is a Lead Associate with more than seven years of experience in leading the design, development, and implementation of business applications. Mr. London specializes in IT project management and IT governance, as well as fiscal performance and accountability solutions for federal CFOs. Mr. London's professional experience includes positions within the Department of Homeland Security/Science and Technology Directorate CIO and CFO, as well as the TRICARE Procurement Support (TPS) office.

Daniel E. Williams is a technology management consultant with more than 10 years of experience in the assessment, design, implementation and management of IT systems. Over the past three years, he has served as a subject matter expert for both Microsoft and open source architectures, with a focus on collaboration and emerging applications. Over the last year, Mr. Williams' work has supported various clients in the application of IT metrics and measurements to proposed and existing technology initiatives.

Contact Information:

Darrin London, PMP
Lead Associate
london_darrin@bah.com
202-254-6369

Daniel E. Williams, PMP
Associate
williams_daniel_2@bah.com
703-377-4372

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