How Cisco IT Transformed into a Services Organization

IT as a Service model boosts IT business value, and levels the playing field for Cisco IT to compete with external service providers for internal business.

EXECUTIVE SUMMARY

CHALLENGE
- Operate IT like a business; think like a service provider
- Develop IT service portfolio and catalog from the user's perspective
- Change the IT-business conversation

Set a value and cost for every IT service

SOLUTION
- Adopt ITaaSO delivery model
- Align IT with enterprise architecture
- Define service taxonomy, new roles
- Implement transparent service costing
- Enforce consistent governance and organizational change management

RESULTS
- Lower total cost of technology ownership
- Increased business agility and speed
- More informed investment decision-making
- Increased IT relevancy
- Higher internal client/customer satisfaction

LESSONS LEARNED
- Don't underestimate the length of the journey
- Obtain commitment from CIO level down
- Define services from the user's perspective
- Promote employee acceptance of change

NEXT STEPS
- Assess service roles and their functions
- Develop service dependency mapping

Re-evaluate service metrics

Background

Becoming an IT as a Services Organization (ITaaSO) is a transformational journey that spans years, not months. It is a journey about boosting business value that flows from IT.

Cisco IT began moving toward an ITaaSO delivery model in 2007. Today we operate like a business, delivering competitively priced services to our internal clients, measuring their needs in a total cost of ownership (TCO) mode, and directly impacting business outcomes.

This case study describes Cisco IT's experience and lessons learned on our journey to becoming a services-oriented organization.

Challenge

Adopting an ITaaSO model is less about technology and more about progressive cultural and process changes. The transition requires pervasive shifts in the way IT is organized; how services are defined, delivered, consumed, and financed; and how IT measures success, evaluates costs, and assigns roles and responsibilities (see Figure 1).

The siloed, functional-based IT organization does not work in an ITaaSO model. Services cut horizontally across vertical functions. Instead of viewing required capabilities as unique to a business function, IT needs to look across functions when discussing solutions.

IT must develop a standardized, competitively priced catalog of enterprise-class services for users to consume. Instead of only the availability of systems, IT is measured on the performance, quality, and user experience of the services delivered, and the direct contribution they have on business value and enablement.

The transformation to ITaaSO involves a significant amount of change in how work gets done. IT employees have to organize and discuss the work of IT differently, and many will need to evolve their roles and skills to succeed in a services-centric model. Solid organizational change management is critical for success.

Figure 1. Transition to IT as a Services Organization

From	To
• IT organization vertical, function-centric	• IT organization aligned with business capabilities across functions
• Technology, systems focus	• Customer / client-focused
• IT measured on delivery and availability of systems	• IT metrics based on integrated strategies, focus on end-to-end service delivery
• Solutions designed with customer input	• Capability roadmaps developed with the business, strategic alignment
• IT assesses and conveys development costs	• IT discusses TCO with internal customers / clients
• Reward custom / unique architecture approach	• Reward reuse, leverage of existing solutions

Strong advocacy by the chief information officer (CIO) is crucial to ITaaSO success, as is buy-in and endorsement from executives across IT and the business. Getting all stakeholders on the same page and keeping momentum going throughout the transformation requires considerable effort and synchronization from all of IT and the business.

Solution

Before bringing others on board, Cisco IT had to clearly define what ITaaSO is and why it is important to the business. We define ITaaSO as a *business model for running IT that delivers value as defined by IT's clients/customers in a cost-effective manner.* This definition embodies three tenets that have guided us throughout the transformation:

Be customer/client-focused:

- Operate like a business, adding value in a TCO mode.
- Represent IT in terms of services delivered versus applications, hosts, networks, storage, etc.
- Inform the business in business terms; engage in conversations focused on business outcomes.

Be business value driven:

- Maximize business value of IT investments (focus on identifying, quantifying, and billing for the value Cisco gets from every internal IT investment).
- Reduce time to capability through reuse.
- Connect business and technology architectures, enabling new business models faster.
- Cultivate close partnership with the business, providing transparency for better-informed investment decisions, improved business capabilities, etc.

Be cost effective:

- Establish IT budgeting and cost transparency.
- Reduce run-the-business (RtB) costs without compromising the quality of IT services.
- Reinvest savings into growing the business.

The move to ITaaSO substantively changes the dialogue between IT and the business. Formerly, discussions between Cisco IT and business stakeholders mainly focused on specific technology deployments and resources, not value. The link between IT investments and company performance was obscured or non-existent. ITaaSO success is demonstrated in our ability to talk about the cost and value of the services we provide, and discuss needs, tradeoffs, and funding decisions in ways that resonate with internal clients and customers.

"Most of our clients aren't interested in technical details," says Shawn Shafai, member of technical staff, IT, Connected IT Services. "They want to know how Cisco IT is going to help them solve a problem, overcome a challenge, or move their business forward. They're interested in business outcomes."

Maintaining Architectural Integrity

Underlying our ITaaSO transformation is an enterprise framework that helps connect IT and business architectures in practical ways. Cisco chose the BOST framework from Proact Business Transformation Inc. An integral part of our communication taxonomy, the framework gives IT and the business a shared language and methodology, enabling users to better plan and manage their demand for IT resources (see Figure 2). The BOST framework organizes inter-linked planning models based on four architecture views of the enterprise:

- Business view (strategies, brands, products, and relationships)
- Operations view (service functions, information and organizational accountabilities)
- Systems view (systems and solutions that support operational capabilities)
- Technology view (technology infrastructure and services required by systems).

Figure 2.   BOST Enterprise Architecture Framework
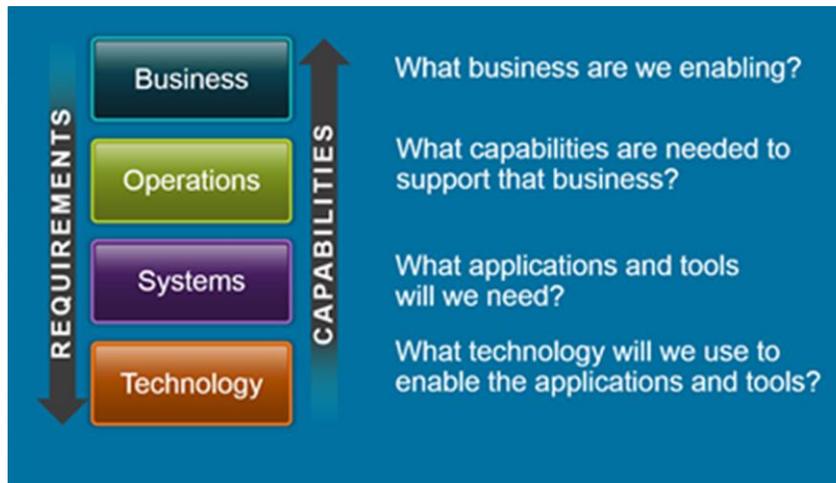
Regular architecture and investment accountability sessions direct and reinforce continuous business-IT alignment. We map IT services to the business capabilities and business processes they enable, and investments to the value delivered by services and the underlying systems, infrastructure, and technology that enable the capabilities. This process feeds IT investments (projects and programs required to support business requirements) and guides portfolio management (prioritizing and funding projects and programs).

Within the BOST framework, business capabilities are understood in terms of their current implementation compared to their target state. Cisco IT develops roadmaps to achieve a target state (realize the business strategy) based on the differences between the current and target states and prioritization of the business capabilities. The capabilities that we need to deliver are sequenced on the roadmaps. Only programs and projects that align with a target state architecture and one or more business capabilities receive funding.

ITaaSO Transformation and the Cisco Domain Ten Framework

Throughout our transformation, we have turned to the Cisco® Services group. They have helped us improve operational efficiencies and free up IT resources to support increasing business demands. Cisco Services provides full lifecycle engagement for organizations that includes infrastructure design reviews, implementation, and operations and optimization consultation.

Cisco Services uses the Cisco Domain Ten® reference framework as a guide for successful IT transformation. Domain Ten provides organizations with an end-to-end view of key elements, or domains, in the data center and IT infrastructure, and a methodology for mapping IT technology capabilities and their interrelationships, and identifying gaps. It addresses technology considerations in areas such as infrastructure (compute, storage, and network), virtualization, and automation and orchestration, along with security, compliance, process, and governance implications as well.

By leveraging Domain Ten, specifically the automation and orchestration domain, Cisco IT has improved time to market, reduced costs, and freed up funds to put toward other areas of the business. Through standardized processes and procedures, we've been able to absorb 50-plus acquisitions into defined services. And we launched internal Platform as a Service (PaaS) offerings that address more than 70 percent of new demand, with gains in operational efficiency.

Teaming up with Cisco Services also helped us garner significant efficiencies in our private cloud infrastructure, which supports the IT self-service catalog and enables on-demand provisioning. For example, real-time provisioning of Infrastructure as a Service (IaaS) offerings has brought our TCO/OS instances down more than 65 percent.

To learn more about how Domain Ten is applied, see Cisco Domain Ten Framework for IT Transformation.

Directing the Transformation

After defining the vision for ITaaSO, we began segmenting the immense amount of work that had to get done. Senior IT staff created a services organization playbook describing six major focus areas for the transformation:

- Taxonomy
- Roles
- Service portfolio and service catalog
- Service costing
- Governance
- Change management.

Taxonomy

At the basic level, service taxonomy provides a common language about what IT provides. Consistent taxonomy applied throughout the IT service portfolio, service catalog, and service management framework is essential to a successful ITaaSO transition.

In ITaaSO mode, we deliver and articulate our value in the form of services. As a service provider to our internal business users and clients, we have to put quality and the user (customer) experience top of mind. Services must be defined from the user's perspective.

Defining and organizing hundreds of services and service components in an organization the size of Cisco IT is a monumental undertaking. We spent nearly two years developing the service taxonomy.

People in IT tend to view each of their individual functions as a service. In reality, what they do might actually be a critical component of a service or a function required to support a service (see Figure 3).

Figure 3.   IT Services versus IT Components/Processes/Functions
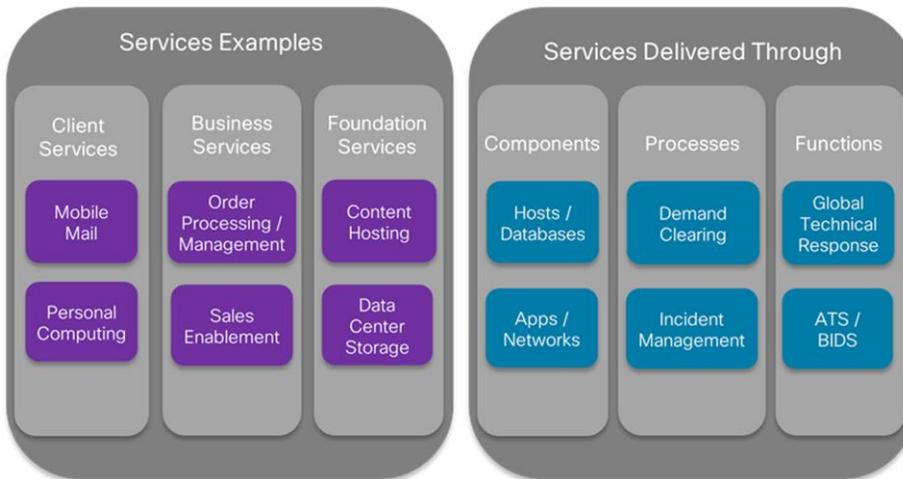
Just as services should not be defined by activities within IT, they should not be defined by how IT is organized, where budget is distributed, or what architecture is used (the connection of processes, systems, and technologies). "We connect the architecture view to the services view through the BOST framework, but we don't let one define the other," says Paul Dench, IT architect, Connected IT Services.

"IT activities, organizational models, architecture None of these views resonate with users. It's not what they see," adds Dench. "It's important to define services from the customers' perspective, not IT's perspective. A service should be something your users will actually consume."

For example, Cisco IT previously had a service we called mobility, which included smartphones and similar offerings. Although well understood by IT and the people who manage the Mobility group, this service did not resonate with users. In fact, when surveyed, users told us they were not looking for something called mobility. They simply wanted smartphones, tablets, etc. Over time, we learned that users want services that plainly identify what IT is offering to them or enabling for them.

Cisco IT defines an IT service as *an identifiable technology-related solution with well-defined functional and operational characteristics. An IT service either directly enables business capabilities or indirectly enables them by providing necessary foundational functionality.* Key service characteristics include:

- Is organization-agnostic.
- Architected from the enterprise reference model and contains business, system, and technology capabilities.
- Composed of requestable offerings that are consumed by a user, business function, partner, or another IT group.
- Defined in terms that resonate with the user, not the provider.
- Delivers a superior user experience.
- Managed through its lifecycle by a service owner.

We use these characteristics as a guide to vet requests for new services as well as define and classify service offerings.

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IT services are one tier in a service taxonomy hierarchy that describes how services are packaged into discrete offerings and how those offerings roll up within the service portfolio. "The service taxonomy provides us with an understanding of the relationships and dependencies of IT services to business services," says Dench.

At the highest tier in the Cisco IT service taxonomy are nine "organizing principles," or service domains (see Figure 4). Cisco IT senior leadership chose these principles as the starting point to begin working down the service taxonomy hierarchy, defining and parsing thousands of potential services and service offerings. The organizing principles are the highest level classifications within the IT service portfolio.

"You don't have to build out the entire pyramid of services at once," says Dench. "For example, if you're going to focus on infrastructure for a few quarters, then spend your effort on defining services and offerings within the infrastructure area alone."

**Figure 4.** Service Taxonomy Organizing Principles
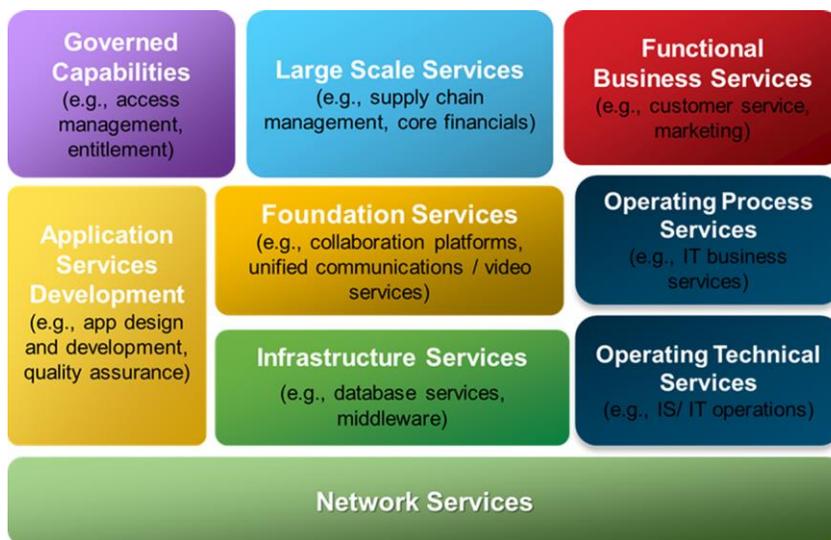
In the service hierarchy, the nine operating principles are followed by service categories, services, service offerings, and service assets (see Figure 5):

- Service categories are predefined by organizing principle or BOST framework names.
- Services are groupings of multiple service offerings. Services align to the Operations, Systems, and Technology views in BOST (see Figure 2).
- Service offerings are variations, or flavors, of an IT service. Offerings are what end users request or subscribe to in the service catalog.
- Service assets are the infrastructure components that enable the service offerings. Assets can also be people, processes, documentation, etc.

Everything in the service hierarchy is managed in the IT service portfolio except service assets. Assets are mapped to the offerings they enable and managed in a separate applications portfolio. While important from IT's perspective, end users do not usually care about what these infrastructure components are called or how they connect to the services. Introducing the concept of service assets helped us reduce the volume of service offerings in the service portfolio.

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Figure 5. Service Taxonomy Hierarchy Example
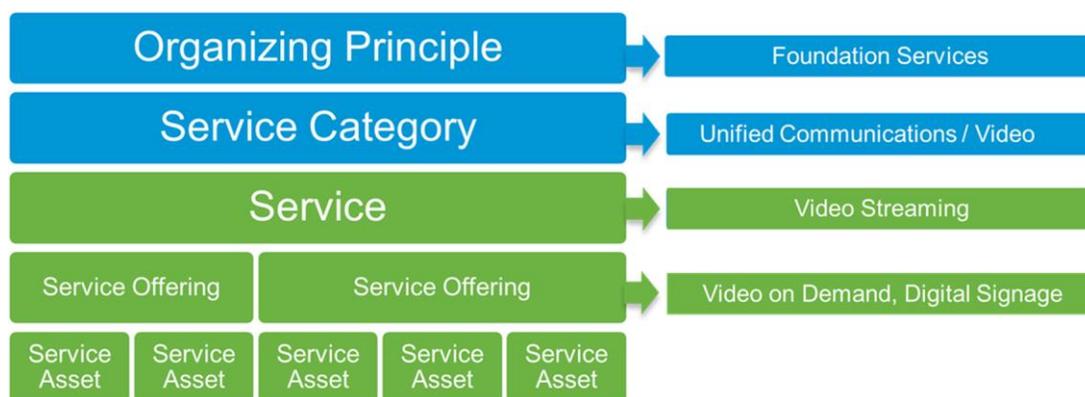
The IT service portfolio has contracted over time as service categories, services, offerings, and assets are reassessed, redefined, and validated through data quality checks. When the service taxonomy was introduced, the portfolio contained 50 service categories, 259 services, and more than 2800 service offerings. Today there are 52 service categories, 174 services, and 720 service offerings. The number of offerings will continue to consolidate as we fine tune our definitions across the service portfolio.

"There isn't a magic number or right amount of services and offerings. Just don't back into a number. Don't say you're going to have ten services and then try to create ten services," says Dench. "Most importantly, IT orgs should exercise due diligence and apply the service definitions appropriately and consistently throughout their portfolio, catalog, and systems management framework."

Roles

Transforming to ITaaSO involves significant change in how work gets done. IT employees must align their work to a services portfolio and undertake various refinements to their processes, roles, and skill levels. Talent is needed to ensure that services are delivered and managed effectively, and to forge strong relationships with business clients. We introduced the following new service roles and responsibilities:

- **Service executive** accountable for overall client experience and operational excellence of the service at the executive level. A member of IT senior staff.
- **Service owner** responsible for end-to-end service delivery including all service offerings.
- **Business relationship management** responsibility for the client relationship with respect to the IT services consumed by the client.
- **Service lifecycle management** responsibility for optimizing service across all offerings and all service lifecycle phases.
- **Service offering management** responsibility for an offering to which a client subscribes/acquires.
- **System/technology architecture management** responsibility for end-to-end architecture for a service, including business and technology architecture requirements.
- **Service roadmap management** responsibility for overall success of delivering the service category roadmap.

The service roles did not eliminate or introduce new job titles within IT. All roles and responsibilities were absorbed by existing employees. For example, there are IT managers who perform the role of a service owner, and project managers who take on service lifecycle management responsibilities.

All IT services have a service executive and a service owner, along with employees responsible for system/technology architecture management. The service owner is accountable for many aspects of the service, including identifying roles needed for the service and establishing a service team of people from functional areas across IT. As with the service taxonomy, the service owner role is not based on functional or vertical organizational lines. This person owns a service end to end regardless of whether the content of the service falls within his or her organization. Likewise, if a service and its corresponding service category are run by three vice presidents in different functional areas, for example, there is still only one service and one service owner that represents all three areas.

Business relationship managers from IT are embedded within business units where they can influence business strategy, promote IT capabilities, identify opportunities, and evaluate service alternatives with their clients.

Service Roles Handbook and Training

To facilitate adoption of the new service roles throughout the IT organization, one of our first major deliverables was an IT Service Roles Handbook. This 26-page handbook not only defines each role and details the associated responsibilities, but also provides principles and guidelines for successful adoption. Using the RACI assignment matrix, service roles are linked to activities in the service lifecycle along with the associated responsibilities, accountability, decision making, and level of participation by supporting team members.

Cisco IT uses a variety of ways to educate and train employees on the service roles and the services transformation, including:

- A series of live training classes for people assigned service roles. Recorded modules are available for employees who cannot attend the live sessions.
- Webinars about the importance of IT's move toward a services organization, and what management and individual contributors can do to support the transformation.
- Mandatory web-based training (for example, everyone in the IT organization must complete a BOST framework introductory course).
- Communities of practice to build and support talent among employees that share a common purpose (for example, a community was established for employees assigned one or more service roles, regardless of job title); community discussion forums encourage knowledge sharing and best practices.
- Brief (less than 10 minutes) video-on-demand modules that educate users about the service portfolio. Training is tailored for anyone assigned an IT service role and for service portfolio administrators; these videos are in the Cisco formal learning and development system, so participants register and receive credit for completing the training.
- Mentoring programs.

Training targeted for service owners is under way, which will focus on customer-centric skills owners need to run their service effectively.

Service Portfolio and Service Catalog

The IT service portfolio and service catalog are key enablers of our transformation to a services organization. The portfolio is the single source of truth for all services we provide employees. All service offerings are documented in the portfolio whether they are currently operational, under development, or retired.

The portfolio defines the service taxonomy and framework, service roles, and IT service lifecycle. It contains data that enables service costing and fuels quarterly service reviews. All users have access to the Cisco IT service portfolio via a centralized, web-based tool.

After service offerings are operational and available for subscription, we add them to our online service catalog, which is called Cisco eStore. The catalog and portfolio use the same service taxonomy. Instead of maintaining a separate list for the catalog, services and service offering names are sourced from the portfolio. "You want to be able to relate information gathered from your catalog back to the service portfolio," says Dench. "Separate lists make this unmanageable. We tried that in the past."

Cisco eStore provides employees with a unified, e-commerce storefront for finding the services they need to do their jobs (see Figure 6). Users pay for the services they consume, administered via service financial management software. Before we deployed eStore, employees had to navigate multiple internal sites and disparate systems to order services from IT. This complexity not only impacted the user experience and productivity, but it was inefficient for IT to manage.

Figure 6.   Cisco eStore Taxonomy: Representative Services and Service Offerings

Example only. Does not represent all requestable services.

Cisco eStore is built on top of Cisco Prime Service Catalog and Cisco Process Orchestrator (see Figure 7). Cisco Prime Service Catalog enables enterprise service management for reporting, chargeback, entitlement, and consistent taxonomy control. Cisco Process Orchestrator handles automated provisioning of all service requests through integration with other systems. With this IT process automation system, requests for IT services, applications, and infrastructure can be processed in minutes instead of hours or days with greater transparency and control for end users as well as for IT.

The eStore low-touch, automated service delivery model has garnered additional benefits for Cisco, including:

- Employee onboarding time saving of up to 5 hours per new-hire
- Twenty percent decrease in how-to cases related to services ordering
- Productivity saving of approximately 15 minutes per user per visit (seamless user experience).

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Figure 7.   Cisco eStore Online Service Catalog

Service Costing

Running IT like a business involves setting a value and a cost for every IT service. Transparent service costing is critical not only because IT service users want to know what they are paying for, but also because costing provides an opportunity for IT to quantify its value to the business.

"Running an IT services shop is one thing. Knowing how to cost services and being able to show that data to groups outside of IT, that's transparency," says Gustav Toppenberg, Cisco IT manager, Architecture, Connected IT Services.

Service costing enables us to:

- Provide showback of total costs
- Support cost-value analysis
- Understand application costs
- Break down the IT budget by service
- Identify opportunities for savings
- Supply data for portfolio and investment analysis

Most importantly, service costing fuels value-based discussions between IT and the business and leads to more informed decision making.

Architecture-Led Investment Planning

Cisco IT works closely with business stakeholders throughout the investment planning process to align delivered capabilities with clients' business requirements. Architecture-led planning maps business requirements to the IT capabilities needed to support them, and investments to the value delivered by IT services and the underlying systems, infrastructure, and technology that enable the capabilities. This process feeds IT investments (projects and programs required to support business requirements) and guides portfolio management (prioritizing and funding projects and programs).

Architecture-led planning helps ensure that IT investments can be tracked back to one or more business objectives and corresponding business capabilities.

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Governance

A consistent accountability cycle underpins our ITaaSO model (see Figure 8). Regular architecture and services reviews reinforce continuous business-IT alignment and service goals.

Quarterly architecture reviews, held by the chief information officer and senior staff, validate IT and business alignment. These reviews are forums for vetting dependencies, risks, opportunities, and projected costs, savings, and benefits. This knowledge fuels informed decision-making and agile course-correcting when business needs change. If service-level agreements (SLAs) established on the roadmaps are not being met, IT and business stakeholders bring issues back into the architectural review to make the necessary course corrections or investment adjustments.

IT service goals and metrics are reaffirmed and reported in quarterly service reviews. Success is measured by the effectiveness of the services and the impact that investments have on the services. In service reviews, the CIO selects services from the portfolio and service managers present their metrics.

Figure 8.   ITaaSO Accountability Cycle

Change Management

Navigating the abundant cultural and process shifts along the ITaaSO journey requires rigorous organizational change management. Every organization, inside and outside of IT, has to adopt a services-oriented mindset. While the path will be somewhat different for each organization, all organizations have to align with the overarching services management framework.

Change management initially focuses on getting organizations to align their senior leadership teams and mobilize, and then on developing continuous learning to drive improvements and putting in place governance and incentives to sustain the culture transformation. Change management involves five major stages:

- Align senior leadership
- Define high-level changes
- Activate first adopters
- Accelerate adoption
- Sustain the new culture.

Efforts are tracked through positive indicators showing signs of progress in each stage.

Stage One: Align Senior Leadership

This stage entails preparing senior leadership in each organization to guide the ITaaSO effort, establishing internal change teams, and communicating senior leadership commitment. Senior leaders must galvanize around the importance of becoming a services organization, manage as a cohesive alliance with other organizations, and ensure that their employees have sufficient resources and clarity to move forward effectively (e.g., learn and use the correct service taxonomy). Internal change teams must have sufficient time, focus, and skills to be credible and keep the change momentum going. Depending on the size of the organization, this team requires one to three full-time people.

Employees need to see unified leadership commitment to the direction. This can be done through regular communications about the transformation, such as ITaaSO value presentations shared with management and cascaded down to their staff, and discussing the progress toward becoming a services organization and answering employees' questions in staff meetings.

Examples of progress indicators for this stage:

- Consistent messaging from the senior leadership team
- The opportunity for all employees to see and respond to an ITaaSO value presentation.

Stage Two: Define High-Level Changes

In this stage, the senior leadership team works with key players in the organization to define the service offerings and the impacts that the change will have on the organization. Each organization must define their service offerings and costs, as well as the associated process and behavior changes needed to operate effectively as a services organization.

Examples of progress indicators for this stage:

- A defined future state that is well understood by senior leaders and key players
- Services and service offerings in the service portfolio
- Costing for services entered in the appropriate system.

Stage Three: Activate First Adopters

Embedding the behaviors of a services organization in the organizational Cisco DNA is complex and cannot be accomplished through management directives and deadlines. Employees must learn together how to be a services organization, which can be facilitated by senior leadership and the internal change teams.

Cisco IT trained primary change agents and first adopter groups to evangelize and model new behaviors to the rest of the organization. The agents and first adopters also gathered employee feedback and helped resolve issues.

Examples of progress indicators for this stage:

- 100 percent of first adopters trained
- People moves completed
- 100 percent of employees aware of the high-level changes and direction
- Active change agents number at least 10 percent of the organization.

Stage Four: Accelerate Adoption

In this stage, the internal change team works with change agents to foster discussions that fuse the transformation into the organization's Cisco DNA. Cisco IT did this by establishing learning communities of practice, instituting short-term behavioral reinforcement, refining service metrics, and hosting celebrations, among other activities.

Examples of progress indicators for this stage:

- 100 percent of people in new roles are trained
- Ongoing sessions of change agents continue being held
- Issues list is decreasing
- Stakeholder surveys show positive regard and high adoption
- Active change agents number at least 30 percent of the organization.

Stage Five: Sustain the New Culture

Cultural change tends to fail because it never achieves the desired business value, does not produce benefits for key stakeholders who need to keep it working, or becomes obsolete. To avoid these pitfalls and sustain the change, the new culture must be able to learn, grow, and adapt. In this stage, Cisco IT established a governance process, mechanisms for course correcting, ways for organizations to continuously improve, and incentives for stakeholders to continue desired behaviors.

Examples of progress indicators for this stage:

- Community of practice in place
- Governance in place
- Ongoing roles training in place
- Regular process reviews in place
- New incentives and reward systems in place
- Success markers trending positively.

Results

Our transition to ITaaSO has yielded several benefits for Cisco. Chief among them:

- **Increased business agility and speed (time to capability)** – Reusing and leveraging existing services and components allows Cisco IT to deliver scalable capabilities faster. Connecting business and IT architectures enables faster delivery of new business models.
- **Progressed new services delivery without growing the total IT budget** – On a flat-to-down overall IT budget for the past five years, we:
  - Rolled out new, global telepresence and video architecture with more than 1600 endpoints
  - Doubled the number of supported end-user devices
  - Integrated more than 50 acquisitions into defined services
  - Cut server provisioning time from 8 to 12 weeks to less than 15 minutes
  - Migrated all applications to x86 with more than 85 percent virtualized
  - Built out a pair of active-active data centers.
- **Improved operational excellence** – Cisco IT has made huge strides in improving operational excellence and reinvesting in growth and innovation by focusing on simplification and moving resources away from operational tasks that do not differentiate or move the business forward.
- **Lower total cost of technology ownership** – Achieved through TCO-enabled cost reduction, reuse, and centrally managed IT budget. Processes are more efficient and less resource-intensive.
- **More informed decision-making** – Transparent service costing provides more direct association of costs to consumption. New reporting and metrics-based approach allows for greater visibility into service performance and business impact.

- **Greater IT relevancy** – Finer IT alignment with the needs of the business, closer partnership with the business to make better investment decisions. IT is viewed as a trusted partner, helping to grow Cisco's business and competitive rank.

Lessons Learned

Following are some recommendations for other enterprise IT organizations embarking on the ITaaSO journey.

Don't underestimate the time it will take to adopt an ITaaSO model. This is a transformational journey that spans years, not months.

Ensure strong advocacy and commitment from the CIO level down. Buy-in and endorsement from senior leadership across IT and the business is crucial.

Abandon the traditional siloed, vertical, functional-based IT organization mindset. Services cut horizontally across vertical functions. Don't let the IT organizational structure, activities, budgets, or architecture drive or define your services.

Don't expect to get service taxonomy right the first time. There is no perfect list or magic number when it comes to the types and quantity of services and service offerings.

Define services from the end users' perspective, not IT's perspective. A service is something that users consume. Developing a catalog of services from this perspective might require rethinking or unraveling terms that are entrenched within your IT organization.

Don't confuse services with critical components of a service or IT functions that support a service. Not everything IT does is a service. What people do and what they offer are two different things. This mixup will dilute the value of the services IT provides.

A service catalog isn't about a particular tool, but the information that gets put into the tool. The shiniest, latest tool won't do the job if the information inside it doesn't resonate with users. Technology won't solve this problem.

Fill the service catalog with what your users need and want: Think through their most-used items. Not everything can or should be put in the catalog at once.

Promote employee acceptance of change. A transition on the scale of ITaaSO will create concerns and questions among employees. Allay their concerns through ongoing awareness and education efforts. And back the transformation with a solid organizational change management plan.

Next Steps

Although Cisco IT is well into the transformation to a services-oriented organization with several successes to showcase, there won't be a time when we can rest on our laurels. As a services organization, we will continually seek ways to improve the users' experience, refine our services and delivery, gain operational efficiencies, exploit reuse opportunities, and strengthen our partnership with the business.

In the near term, we are:

- **Assessing the effectiveness of the service roles and their functions**. There might be room for consolidation.
- **Developing the process of service dependency mapping and configuration management**. "You have to understand all the technical infrastructure connections behind each service," says Dench. "How does an application connect to the host, to the database, to the network, and ultimately to the service? If a change occurs, what's the impact on the business? Who should be notified?"
- **Re-evaluating our service metrics and how we use them**. The same metrics can't be applied across all services. Are we gathering extraneous metrics? Collecting data simply because we can? How much information do we need to determine if we're going in the right direction?

Lastly, says Dench, "We'll continue to improve the quality of the data and service definitions in our IT portfolio. It's never a done deal."

For More Information

Cisco IT Case Study: eStore for IT Services

Cisco IT Best Practice: IT as a Services Organization Roles and Responsibilities

Cisco IT Insights: IT Strategic Investment Planning

Cisco Services At-a-Glance: Cisco Domain Ten Framework for IT Transformation

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