



THE BUSINESS VALUE OF IT ORGANIZATION'S TRANSFORMATION TO AN INTERNAL SERVICE PROVIDER

F R O S T & S U L L I V A N

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INTRODUCTION

Enterprise IT organizations are burdened by the current fast-changing business and technology environment. The IT department needs to support exponential growth in enterprise data; accommodate new technology trends such as virtualization, cloud computing and big data analytics; provide anytime anywhere access to corporate IT resources by geographically distributed users; and ensure compliance and governance across IT applications.

Traditionally, the IT department has been tasked with infrastructure and software purchases, maintenance and upgrade activities, and policy enforcement. However, lack of collaboration between line of business (LOB) and IT departments, and the slow response times to LOB requests has led to emergence of “shadow IT” wherein business managers are purchasing IT resources (for example, Google Docs or Skype for business calls) without involving the IT team. In the Frost & Sullivan software as a service (SaaS) survey, more than 80 percent of employees admit to using non-approved SaaS applications to do their jobs. Hence, the IT department is not only under pressure to adapt to new technology and business trends, but also has to deal with compliance issues and security threats arising from unauthorized IT solutions sourced by LOB managers.

While the rapid growth of on-demand, pay-as-you-go cloud computing services continues to fuel growth in shadow IT, it also presents IT organizations with an opportunity to reinvent themselves by stepping up to be an internal service provider. ***As an internal service provider (similar to a cloud service broker) the IT organization procures cloud services from multiple internal resources or external vendors, negotiates and manages IT contracts, aggregates the cloud services, customizes them to internal customer needs, and tracks against consistent performance metrics.*** By positioning itself as the “go-to” organization for procuring cloud services, the IT team can eliminate shadow IT, embrace cloud services in a holistic manner, ensure consistent application performance, and support regulatory compliance for enterprise applications.

In this paper, we discuss the business trends that are driving the need for an internal service provider model; how embracing the role of an internal service provider can help IT reinvent itself; the organizational benefits of transforming to an internal service provider model; and finally, pointers on how to choose the right vendor to fast-track the journey.

BUSINESS TRENDS DRIVING THE NEED FOR IT ORGANIZATIONS' TRANSFORMATION TO AN INTERNAL SERVICE PROVIDER

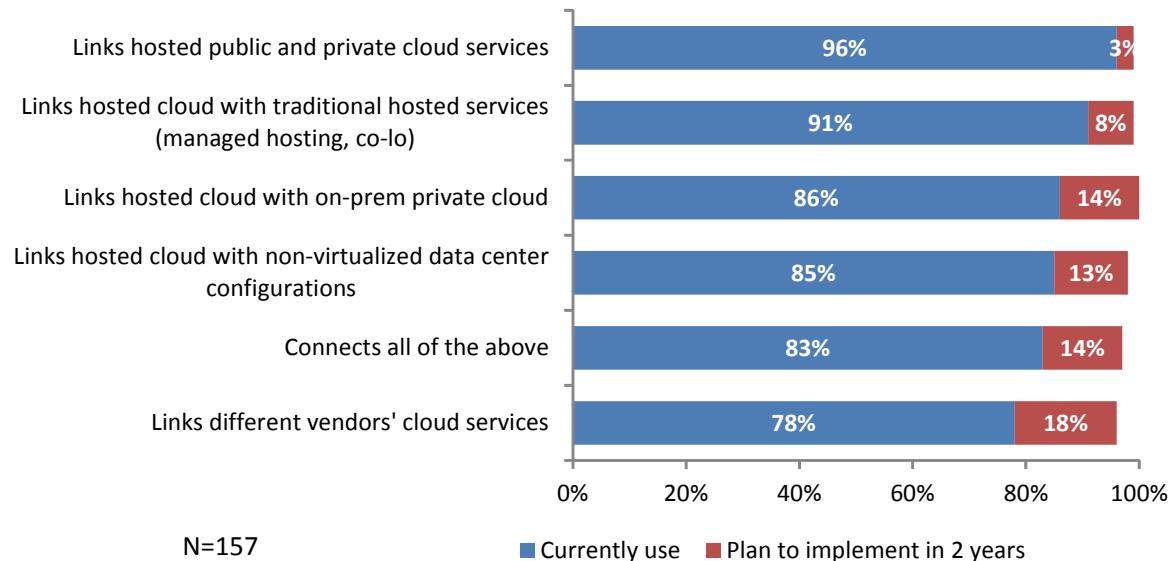
Several key business trends are driving the IT transformation to an internal service provider:

Need to Improve Business Agility

The emergence of cloud computing has greatly enhanced the speed with which enterprises can deploy applications, procure IT resources to support distributed employees and partners, and enter new markets without having to invest in local data centers. In the 2014 Frost & Sullivan Cloud survey, 50 percent of the respondents indicated they are using cloud services. Backed by cloud solutions, the business can respond quickly to changing market or competitive conditions without having to requisition, purchase, and install infrastructure. However, as cloud adoption continues to grow, the enterprise IT environment is becoming increasingly hybrid, consisting of on-premise and hosted data centers, physical and virtual infrastructure, private cloud and public cloud.

In the same cloud survey, 46% of the respondents indicated they are currently using a hybrid cloud, which they defined as some combination of traditional hosting, private cloud and public cloud. Exhibit I shows the responses for various hybrid cloud configurations.

Exhibit I: Hybrid Cloud Adoption Trends by Configurations



Source: Frost & Sullivan

Hence, there is a pronounced need for an intermediary or internal service provider that can devise an optimal cloud strategy to choose the right environment for each workload, and to manage all the resources as a single, seamless pool.

Need to Reduce Total Cost of Ownership and Improve Operational Efficiency

As an enterprise's IT department works to keep up with the growing data compute and storage requirements, provide 24x7 access to its employees, partners and suppliers, and roll out new applications, the cost and effort of deploying new data centers can be prohibitive. A hybrid IT environment can help businesses reduce the total cost of ownership by keeping highly mission-critical applications in private data centers, and offloading certain workloads to more cost-effective external cloud environments.

Cloud-based services shift the IT spending model from capital expenditure to operational expenditure, wherein the IT department can deploy IT resources in an on-demand manner, as and when the need arises. The flexibility and agility offered by cloud services further enable enterprises to align, and re-align, IT services with business goals, and track IT costs by the LOB or departments requesting the resources. The increased transparency in IT resource consumption by LOB, and costs associated with it, leads to greater operational efficiency for the business. For the IT department, moving to the role of an internal service provider that is responsible for end-to-end management of cloud services—choosing the right cloud (public, private, managed) for the specific workloads—greatly enhances its strategic role within the enterprise.

Need to Accommodate Technology Trends such as Big Data, Mobility, Collaboration, etc.

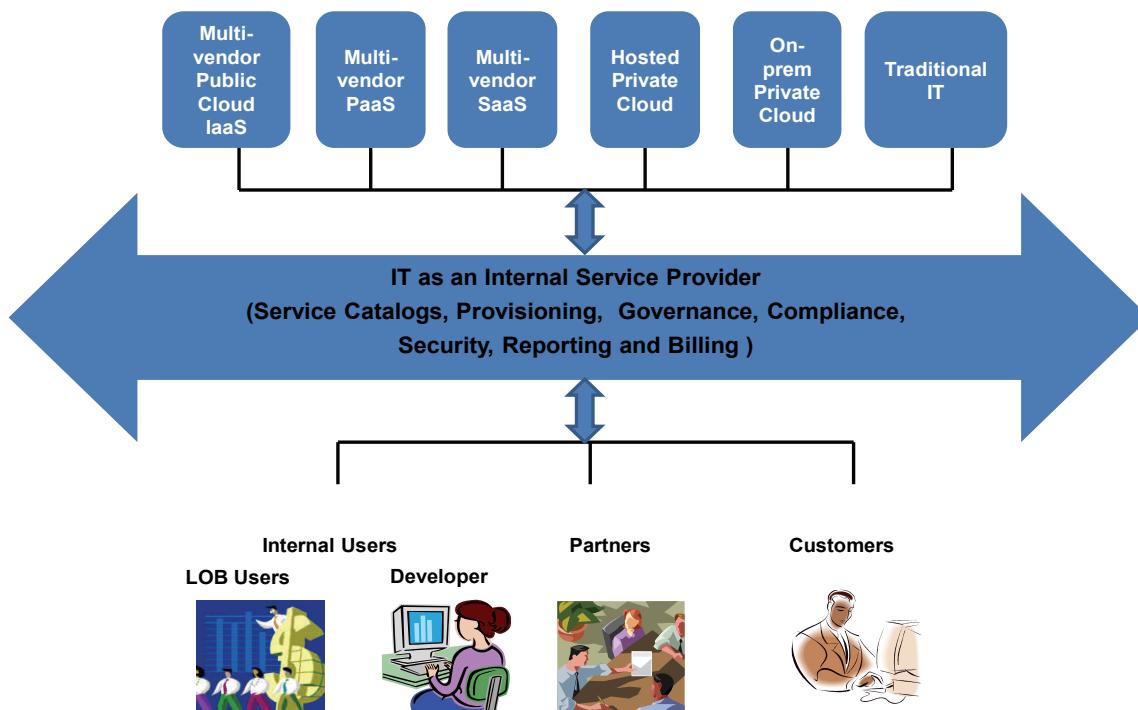
In the 2014 Frost & Sullivan Cloud survey, 28 percent of IT decision-makers cited “keeping up with new technology” as a key challenge their company faces when it comes to managing the data center infrastructure. Sixty-eight percent (68%) of the respondents in the same survey agreed with the statement “cloud better positions my company to take advantage of new technologies.” These two responses suggest a strong business case for using hybrid cloud to help enterprises adopt and implement new technology trends such as mobile access to cloud, big data and analytics, and collaboration solutions. By becoming an internal service provider, the IT organization can leverage different cloud models to better enable leading-edge technologies for its internal customers.

IT CAN RE-INVENT ITSELF BY BECOMING AN INTERNAL SERVICE PROVIDER

Frost & Sullivan believes that the internal service provider model creates a unique opportunity for the IT organization to reinvent itself as a strategic enabler of business goals, by becoming the intermediary between cloud resources (internal or external) and LOB managers.

The internal service provider model involves the use of right technology and processes—standardized (open-source based) and automated service delivery and management platforms—for IT to enable the right service to be delivered at the right time and right price to its internal customers. As an internal service provider, the IT department creates and manages a catalog of services, from which employees choose and deploy the services they need to do their jobs. Exhibit 2 depicts the internal service provider model.

Exhibit 2: Internal Service Provider Model



Source: Frost & Sullivan

Key features of an internal service provider model that supports the end-to-end lifecycle management of hybrid IT include:

- **Self-service portal:** By automating service delivery on hybrid cloud platforms, IT teams can create service catalogs that business users can access through an intuitive, self-service portal. Users can, at the click of a button, order a new application or service. From an IT management perspective, once the service catalogs are constructed, the IT team can control access to them. User access can be defined and limited based on department, user or job requirements.
- **Standardized processes:** Standardized processes streamline onboarding tasks, and minimize errors, ensuring fast, consistent deployment of vendors. The internal service provider model also provides best practices for vendor management, including processes for assessing business needs, evaluating vendor capabilities, procuring services, and managing vendor performance.
- **Governance:** Automated service delivery enables the IT department to enforce policies concerning vendor evaluation, procurement, and management.
- **Security and Compliance:** As an internal service provider, the IT department can ensure uniform security, compliance and data locality policies across different IT platforms and services.
- **Service Level Agreements (SLAs):** The internal service provider model uses powerful hybrid cloud platforms, with common management tools, which enable IT to ensure that deployment, delivery and management tools are synchronized across all services and vendors. It also helps with service assurance to coordinate key performance indicators across services and vendors; and establish common tracking and reporting mechanisms. Thus, as an internal service provider, the IT team can establish and manage SLAs for its internal customers.
- **Lower costs:** The internal service provider model introduces efficiencies that can lower the operational costs to manage vendors. Furthermore, because IT has greater visibility into service usage and vendor performance, businesses also may see a reduction in the amount they pay for vendors' on-demand services.

KEY ORGANIZATIONAL BENEFITS FROM TRANSFORMING TO AN INTERNAL SERVICE PROVIDER MODEL

Increased Collaboration between IT and LOB

In the pre-cloud era, LOB managers were highly dependent on the IT teams to procure, deploy and manage IT resources for them. However, with increased capital budget restraints and the pressure on IT teams to do more with fewer resources, not all LOB managers' requests got priority. This has led to LOB managers turning to easy-to-deploy and inexpensive cloud services. In fact, it seems that the more IT focuses *inward*, on their own processes and challenges, the more likely LoB managers are to turn outward.

By becoming an internal service provider, the IT organization's focus shifts from a builder of services to that of a consultant who evaluates LOB requirements, and provisions the best solution for its internal clients. This means increased collaboration between IT and LOB, as the IT team is now an intermediary working for business groups, while negotiating with cloud service providers. The end results include reduction of shadow IT, reduced process

and cost inefficiencies, improved security and compliance, and centralized management, leading to consistent application performance across services.

Faster Infrastructure Provisioning

The ability to quickly provision IT resources in an on-demand manner is the core value proposition of cloud computing services. Cloud, with its readily available templates and application programming interfaces (APIs), enables IT teams to deploy workloads in minutes, rather than days.

As an internal service provider, the enterprise IT can play a consultative role in understanding LOB requirements, and provisioning the cloud service—private cloud, public Infrastructure as a Service (IaaS), Platform as a Service (PaaS) or SaaS—that best suits the application requirement. By automating service delivery, and providing self-service access to a catalog of cloud services, the IT department is in a position to quickly provision the appropriate IT resources for its internal customers (business managers), based on criteria such as security, compliance, data locality, SLAs, price and application performance. The internal service provider model offers visibility into service cost and utilization, which means that the business can tightly manage its resources, ensuring that investments are consistent with the goals of the business.

Eliminate Shadow IT

Cloud computing has made it extremely easy for LOB managers to procure IT resources on their own. For example, anybody with a credit card can procure public cloud compute services within minutes, to deploy workloads, pay just for the time the service is used, and disconnect the service without IT ever knowing about it. Frost & Sullivan broadly defines “shadow IT” as IT resources used by employees for business, which have not been approved by the IT department or obtained according to IT policies. The non-approved applications may be adopted by individual employees, or by an entire workgroup or department.

While it is true that shadow IT could consist of IaaS or PaaS or SaaS cloud services, SaaS applications dominate the space, as users can access SaaS apps via the Internet, using their Internet browser, from any Internet-accessible device. In most cases, little or no client-side software is required, which means that the SaaS solution leaves no “footprint” on company-owned devices. The ability to choose their apps generally contributes to employee satisfaction and productivity, but the company has no visibility into the vendors and usage; and, therefore, cannot take steps to manage performance, protect corporate assets, and control costs. By becoming an internal service provider, the IT organization can eliminate shadow IT, and the related security, compliance, performance and waste risks, as IT is the one procuring and managing cloud services. Also LoBs can easily select the services they want from the catalogue of approved SaaS apps, rather than go rogue.

Centralized IT Sourcing To Efficiently Manage Multi-Vendor Cloud Offerings

The myriad of options offered by a multi-vendor cloud environment is of immense value to enterprises, as they can pick and choose the vendor offerings that best suit their application requirements. However, negotiating and executing contracts with each vendor can be time consuming and hinder the enterprise’s ability to respond quickly to market conditions. Furthermore, managing multiple disparate platforms, and integrating services with existing IT infrastructure can be a huge challenge. There is also limited visibility and control for the IT team when each vendor’s metrics and dashboard is different, which makes it difficult to assess overall performance for a multi-vendor solution. As an internal service provider, the IT department develops and implements policies concerning vendor evaluation, procurement, and management, which are agreed to by senior business and IT stakeholders. The internal service provider also takes care of the service orchestration to ensure that

deployment, delivery and management tools are synchronized across all services and vendors, and key performance indicators are established for common tracking and reporting mechanisms.

Ensure Regulatory Compliance and IT Governance

As the number of cloud services (multiple public IaaS solutions, PaaS, or multiple SaaS applications) used in an organization increases, so does the complexity of ensuring security and governance for multi-vendor cloud services. In an internal service provider model, the IT organization manages the end-to-end service lifecycle, which includes service orchestration, service assurance, compliance, data locality and governance activities. As an internal service provider, the IT organization extends its knowledge of security, regulatory and governance policies to cloud services to minimize risks in a multi-cloud environment.

FAST-TRACK THE JOURNEY TO AN INTERNAL SERVICE PROVIDER BY WORKING WITH AN END-TO-END IT SOLUTION PROVIDER

The IT organization's transformation from a builder of piece-meal IT services to an enabler of true hybrid cloud services—an internal service provider—is a critical journey for IT to undertake. Choosing the right IT vendor to partner with can make this journey less challenging. The following section details the key factors to consider while evaluating an IT solution provider.

Open-source platforms – Working with a cloud vendor that offers open, standards-based cloud platform and infrastructure components is critical for applications and data to move easily between different cloud environments. OpenStack® technology—developed by a global community of developers and cloud technology experts who produce various components for cloud infrastructure solutions—is the most commonly used open source platform, on which most cloud vendors are standardizing for both public and private clouds. OpenStack-based cloud services and APIs are easy to logically organize in a service catalog; and, hence, it becomes simpler to build, test, and deploy services at scale, and offer them to the business at speeds unreachable in prior IT environments.

Strong portfolio of cloud services – Consider an end-to-end solution provider that can offer a strong suite of cloud solutions—on-premise cloud, public cloud, private cloud, managed cloud—which makes it easy to plan for a hybrid cloud model. In addition, choosing a vendor whose portfolio includes IT systems, software, cloud, and managed and professional services—all designed to provide consistent, enterprise-quality performance—can help throughout the IT transformation journey.

Flexible and portable platforms – Consider a hybrid cloud platform that is scalable to meet the demands of the applications it supports. As an internal service provider, the IT team must have the capability to build and re-build exactly the environment it needs, and to re-configure that environment to enable new services, with only a few clicks of a mouse. Hence, it is important to choose a provider that can enable the integration of application programming interfaces (APIs) from anywhere in the IT ecosystem, whether traditional or cloud-based, and regardless of whether the component is its own or from a third-party.

Proven professional services capability – Choosing a cloud vendor with a strong consulting background that includes planning, development of the service portfolio, service design, governance, implementation, and management of organizational change can help speed up the move to an internal service provider model.

THE LAST WORD

Cloud computing has changed the enterprise IT landscape in an irreversible manner. While it is a challenge for IT organizations to deal with multiple cloud services, there are benefits to embracing the multi-cloud environment, as hybrid IT is here to stay. As described in this paper, the cloud service brokerage model facilitates a smoother migration to a hybrid IT model. The IT organization, with its deep technical and IT management expertise, and insight into existing IT investments, can be the ideal choice for an internal service provider role. As an internal service provider, while IT still leads all technology projects, its role shifts from a builder of services to a broker of services—providing the right services at the right time, and at the right price—with a focus on managing governance, compliance, security and performance of applications. Furthermore, the internal service provider model facilitates the alignment of IT costs and investments to business goals, thus elevating the IT organization's role to a strategic one.

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