

Self-Service IT and User Empowerment

*TURBOCHARGING A SLOW CAR
IN A FAST RACE*



SECTION ONE

Getting IT Resources Faster

IT SERVICE DELIVERY HAS EVOLVED
FROM TRADITIONAL IT SERVICE
MANAGEMENT (ITSM)

*“Cloud offerings have
taken a wrecking ball to
traditional ITIL ideology
and processes.”*

- Rick Kilcoyne, VP of Solutions Engineering
at CloudBolt

Wouldn't you love to have everything you needed to do your job at your fingertips 24x7? That has never been the case, but it's changing.

To facilitate changing needs, IT service delivery has evolved from traditional IT service management ([ITSM](#)) to more modern service management approaches. The world of IT is moving rapidly, with easy-to-get public cloud resources available with just a credit card swipe, the onset of agile and DevOps teams, and specific business units getting their own IT resources.

Today, individuals and groups within an enterprise provision and run their own infrastructure. This is a sea change from the face of the restrictive, governed processes of the Information Technology Infrastructure Library ([ITIL](#)) processes for the ITSM.

By getting the right resources to do our jobs, we're far more likely to be productive and innovative, and to have higher morale. This holds true in all aspects of our lives. Waiting for something to get done is a drag when you can do it yourself faster.

Retail stores have self-checkout that can get you out of the store in a jiffy. Having an EZ Pass in your car lets you scoot

through a toll line or go faster in a special lane. Slowdowns can happen for any number of reasons, including other cars or the car you're driving yourself. (For a quick summary, see [Self-Service IT and User Empowerment](#).)

“Cloud operations have taken a wrecking ball to traditional ITIL ideology and processes,” says Rick Kilcoyne, vice president of solutions engineering at CloudBolt Software. Why waste time with traditional IT processes to get resources when it's easier to get and manage them yourself?

Most enterprises now have a mix of legacy and ticketing systems, as well as a hodgepodge of cloud adoption and self-provisioning processes that were developed in many silos across the organization.

Here are some ways that IT leaders now enable a continuum of ITSM, self-service IT, and more modern service management approaches:



Service Tickets

IT deploys a service ticketing request system where employees enter their requests based on a menu of choices for actions such as requesting a laptop or addressing an HR concern. A ticket is generated and tracked, workloads are assigned to whoever is responsible, and the ticket is updated and closed.



Direct SaaS

IT gives employees user accounts to various software-as-a-service (SaaS) vendors for expenses, travel, resource planning, etc. In many cases, they enable a single sign-on (SSO) capability so end users don't have to use different credentials for each of the resources they need to access. IT typically pays the SaaS vendor based on the number of users.



Direct PaaS or IaaS

- IT allows end users or groups of end users to provision their own platform-as-a-service (PaaS) resources for projects that are more application development focused, or
- It gives them infrastructure-as-a-service (IaaS) resources for projects involving individual servers or services to whole data centers and virtual networking resources.

These resources can be paid for based on lines of business or from central IT.



Service Catalog

IT provides a centrally managed system that abstracts one or more of the previously described self-service strategies. End users or groups of end users, based on roles, access some or all of the workflow provided by the backend ticketing, SaaS, PaaS, or IaaS platform to achieve a workflow. The goal here is to remove the complexity for end users and enable a more enterprise-wide view and management of self-service resources.

Combining traditional IT with modern digital services involves balancing the enforcement of certain effective policies while empowering individuals to take advantage of newer technologies to innovate for new digital business.

Problematic IT Provisioning

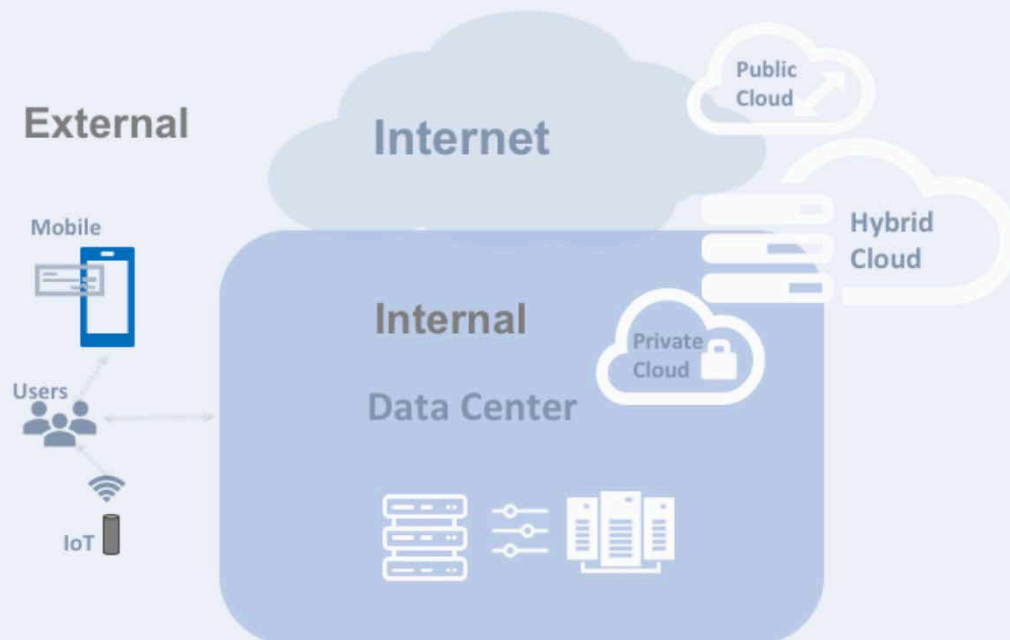
TENSION EXISTS AMONG THE HIGH-LEVEL EXECUTIVES IN THE ENTERPRISE, CENTRAL IT, AND TECHNICAL TEAMS.

“Information architectures become [digital] ecosystems. When different media and different contexts are tightly intertwined, no artifact can stand as a single isolated entity. Every single artifact becomes an element in a larger ecosystem.”

- Peter Morville, [Intertwined: Information Changes Everything](#)

The challenge of balancing IT governance with empowerment is affected by the race to capture digital business. Application developers have access to a more sophisticated digital ecosystem of interconnected data and compute power that is available from almost anywhere.

DIGITAL ENTERPRISE ECO-SYSTEM



This fast-moving digital ecosystem has affected most enterprises by adding IT complexity that has crept outside the central control and governance of most IT departments. Individual teams and departments are running resources in public clouds, ringing up expenses that are added to the bottom-line calculation of revenue.

In some cases, the need to innovate outweighs the potential overspend.

Tension exists among the high-level executives in the enterprise, central IT, and technical teams, which have sometimes given up on traditional IT processes because they have become outdated and slow.

Many factors can slow down any IT environment. Problems can arise because:



Requesting and provisioning resources require multiple steps

The process can include a back and forth between a ticketing system and IT operations staff and/or other departments.



Consistency is lacking in provisioned IT resources

Each time IT resources are requested, they are provided and provisioned as a custom order, rather than being delivered from a menu of standard offerings that are easier to deliver consistently.



Getting resources requires special training or technical advice

As new technologies emerge, understanding how to use them requires training or the expertise of others within the organization.



IT issues arise from the use of non-IT controlled resources

IT issues that occur from resources provisioned outside the control of central IT can take longer to address without seasoned troubleshooting workflows.



Legacy systems are insufficiently integrated

Technology inherited from mergers or acquisitions can be phased in or out and cause a disruption in the flow of IT resources to the incumbent or newer employees.

Having all of these disjointed and slow resources for end users within an enterprise will eventually catch up with central IT. Both budget and efficiency will be challenged all the way up to the top. In the meantime, when users get resources, they might not have the compute power they wanted, and the turnaround time to fix an issue might make everything even worse.

Slower IT processes have given rise to the shift from traditional ITSM to the more modern service management approaches enabled by cloud offerings.

Balancing Enforcement with Empowerment

A BALANCING ACT OF PROVIDING
RESOURCES THAT EMPOWER END USERS
WITHOUT UNNECESSARY RISKS

*“My experience is that
the more you automate and
abstract from the developers
around infrastructure, the better
and cheaper it will be.”*

- David S. Linthicum, Chief Cloud Strategy Officer
at Deloitte Consulting

<https://www.infoworld.com/article/3311825/serverless-computing/serverless-cloud-computing-dont-go-overboard.html>

As so many enticing new technologies have become available to anyone, traditional IT is faced with the challenge of relevance. What good is an IT department if it impedes the overall progress of the organization? IT professionals need to innovate for new digital business initiatives, but don't want to be hampered by a process that doesn't achieve measurable value.

Most enterprise IT departments were cautious about new technologies from cloud providers – for good reason. Losing control of core compute power inside a protected data center causes any IT administrator to think twice, maybe three times.

However, alongside this need for control as a core IT principle, agile and DevOps delivery models have proven to be a more resilient way to do digital business. Errors can be corrected faster, and recovery is built into processes that would otherwise stall business for hours and days.

Manual tasks that would once have taken down a whole network or key element of a mission-critical application have been virtually eliminated by automation and orchestration processes. The main side benefit is the realization that this is actually a more secure way of managing digital business. Once a set of tasks has been hardened into an automation process, there is little chance of introducing errors brought on by manual efforts.

We can thank all the agile developers who have cut out so much of the testing and QA that used to be a huge part of the IT delivery process. We now automate the testing to eliminate manual steps.

This all sounds good, and it's probably why shadow IT has been thriving without the negative connotations it once had. *The clouds have won.*

But there's still a risk that digital transformation might not get done properly in the "wild west" of clouds for everyone. A lot can go wrong, and what was once promising ends up being inefficient or unexpectedly costly. A lack of oversight or shortage of the right skill sets can quickly create a disaster.

For modern IT service management to remain relevant, the focus has turned to brokering services rather than provisioning them directly. The degree to which it is "self" versus "someone-else" doing it as a service varies, and continues to evolve.

A self-service strategy to have the right IT enterprise resources at the right time for the right digital task can have a huge impact on the overall success of the digital business underway.

SECTION FOUR

Modern Service Management Approaches

NEW CLOUD-NATIVE IT RESOURCES CONTINUE TO ENTICE IT LEADERS WHO NEED TO FIND WAYS TO DO MORE WITH LESS OVERHEAD.

"The Home Depot provisioning went from 1-2 weeks via submitting tickets to under 20 minutes via self-service"

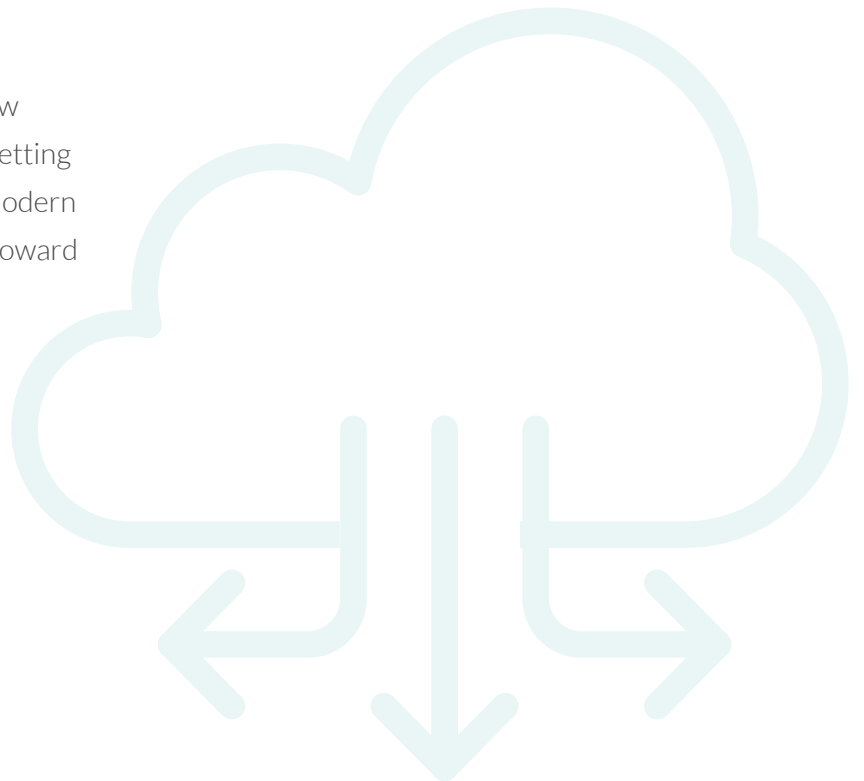
- Colin Thorpe, Account Executive at CloudBolt Software

A dramatic expansion of digital business results from a more accessible ecosystem of connected Internet of things (IoT). Integration capabilities with REST APIs and open source technologies – coupled with the ability to host compute power anywhere – has fueled the value that major cloud providers bring to the enterprise. New cloud-native IT resources continue to entice IT leaders who need to find ways to do more with less overhead.

As major cloud providers want to gain the business of enterprises, they continue to evolve their offerings with native cloud offerings that differentiate themselves above the competition. For example, each major provider now offers a serverless computing service, big data processing, and the ability to orchestrate containerization with Docker and Kubernetes.

IT departments must determine how much they want to invest without getting too locked into any one vendor. A modern approach means they are working toward empowering, instead of enforcing outdated policies.

To gain back the trust of end users who have previously gone out on their own, modern IT service management approaches must be perceived as adding more value rather than impeding progress. IT departments must work toward shorter cycles to update and deliver resources as needed.



IT departments that transition from provisioning to brokering:



- Test and identify what cloud services to broker to end users
- Plan for automated service provisioning where possible
- Establish a full-lifecycle plan for provisioned resources
- Implement cost transparency and governance
- Provide self-service IT that empowers end users

Modern service management approaches benefit from having a single platform to manage all of the complexity to:



- Improve end-user productivity by providing a self-service IT portal instead of requesting and waiting for resources
- Control user access to IT resources that are managed on the back end by IT administrators
- Eliminate the need for specialized training and/or technology expertise for end users
- Facilitate innovation with readily available resources for development and testing

An enterprise hybrid cloud platform with prebuilt connections to the most common on-premises, private, and public cloud providers, as well as extensibility to any resources, can help.

CloudBolt is a cloud management platform for all clouds – internal and external – helping end users leverage compute, network, and storage resources from anywhere that is deemed appropriate for the enterprise. Enterprises can deploy infrastructure to run digital business services and applications when and where they need them across multiple private cloud and public resources to avoid vendor lock-in.



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ONE VIEW. MANY CLOUDS. Automation. Flexibility. Control.

CloudBolt's hybrid cloud platform enables enterprise IT departments to build, deploy, and manage private and public clouds quickly and efficiently. The user-friendly portal hides the complexities of hybrid cloud, giving end users the ability to manage and provision resources on demand, while administrators set provisioning conditions for governance. With CloudBolt, IT leverages its investment and controls costs while increasing flexibility and agility.