A hybrid IT management strategy for multiplatform operations teams

IBM

Challenged by IT complexities, high costs and slow deployment times? Hybrid IT management could be your answer.

Public clouds. Private clouds. Traditional, on-premises IT. Depending on your scenario, your organization has applications, databases, software and infrastructure on any or all of them. The problem: the arsenal of tools and systems it takes to keep it all up and running.

If you're feeling the pain of trying to manage across an array of IT environments, you're not alone. In a recent survey commissioned by IBM[1], respondents expressed their top challenges—and they may well look familiar to you (see Figure 1). It's become painfully apparent that siloed tools alone cannot deliver the correlated, integrated information you need to support the complexities of your hybrid IT environment.[2]

The latest thinking on hybrid IT management: A survey

IBM commissioned a quantitative web survey to explore IT management challenges — and the role that hybrid IT management strategies can play in resolving them. The 100 participants were U.S. IT executives with operations responsibilities. They work for both large enterprises and midmarket organizations, and within a mix of industries. As well, these organizations had hybrid IT environments, defined as using more than two public cloud providers and/or private clouds. Their responses form the basis of this report.

So how do you effectively manage disparate IT management tools, inconsistently formatted data and disconnected systems—and reduce complexity and costs? If you'd like to launch new apps more quickly, resolve problems faster, and improve application performance, a robust hybrid IT management strategy could be the answer.

Top challenges in managing IT environments
(% rating 4 or 5 on 5-point scale; n=100)

52% The high cost and complexity of using numerous management tools

45% The time required to identify and resolve problems

44% Inability to seamlessly migrate applications to cloud

43% New/upgraded apps not developed and launched quickly enough

38% Inability to analyze perfomance and availability in an integrated way across infrastructure, cloud and app environments

37% Insufficient automation capabilities in IT management tools

37% Insufficient analytics capabilities embedded into IT management tools

26% Levels of application performance and availability are not meeting customer needs

Figure 1. Top challenges in managing an IT environment.

What exactly is a hybrid IT management strategy?

Here's the breakdown. An effective hybrid IT management strategy:

- Helps integrate the tools, processes and data generated by your complex hybrid IT environments.
- Provides effective monitoring elements that help synthesize and automate data across your IT infrastructure.
- Empowers you to more quickly diagnose and prevent IT issues.
- Infuses analytics and cognitive insights into your hybrid IT management system.

While a comprehensive hybrid IT management strategy can include up to five components (see Figure 2), it actually serves to *streamline* your IT environment. In short, it can reduce complexity, increase efficiency and reduce costs.

Companies find hybrid IT management strategies valuable—and they're increasing their investments.

A majority of survey respondents (65 percent to 75 percent) perceive value in what a hybrid IT management strategy can offer (see Figure 3). In fact, nearly one-third of companies are planning for greater increases in hybrid IT management investments than in other IT management areas. And 75 percent of companies plan to increase their investment in hybrid IT management solutions from last year.

Approximately 80 percent of respondents have already implemented at least basic capabilities for five hybrid IT management components—or are actively planning to do so in the next 12 months.

Five components of a hybrid IT management strategy

Application server
Easily move your existing applications to the cloud

IT operations management
Monitor and manage IT operations to help identify and resolve problems fast

Application Performance Management
Effectively manage application performance and reliability, and avoid costly outages

IT operations analytics
Collect IT data from different sources, examine that data in a broader context, and proactively identify problems in advance of their occurrence

Hybrid cloud management
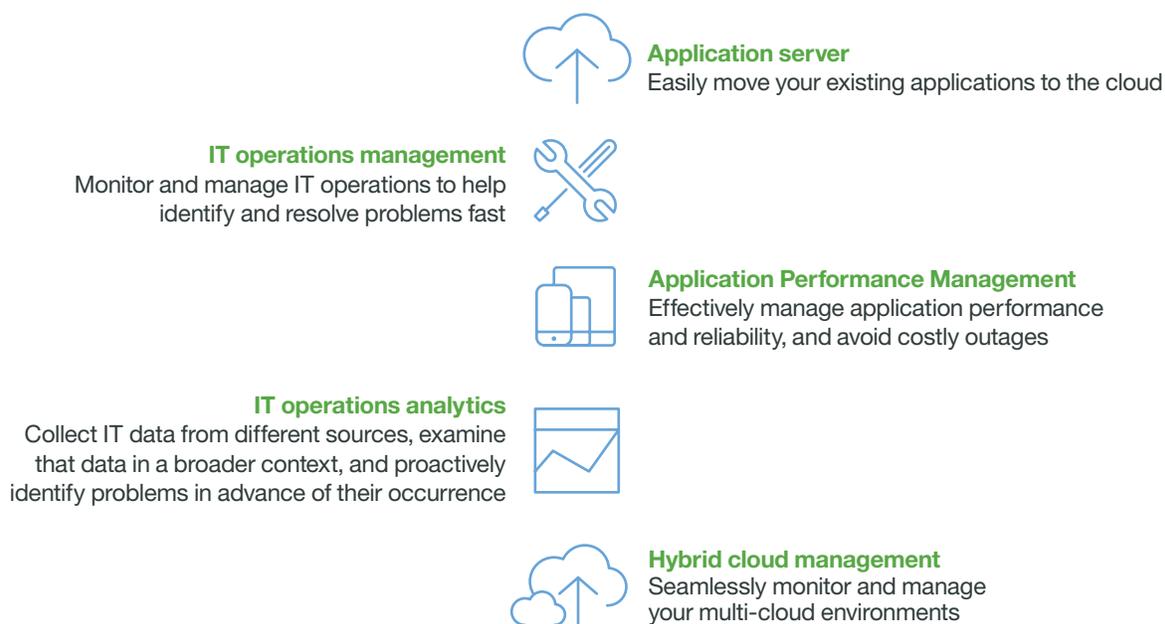Seamlessly monitor and manage your multi-cloud environments

Figure 2. The five components of a hybrid IT management strategy can streamline your IT environment.

**Perceived value in incorporating IT management tools
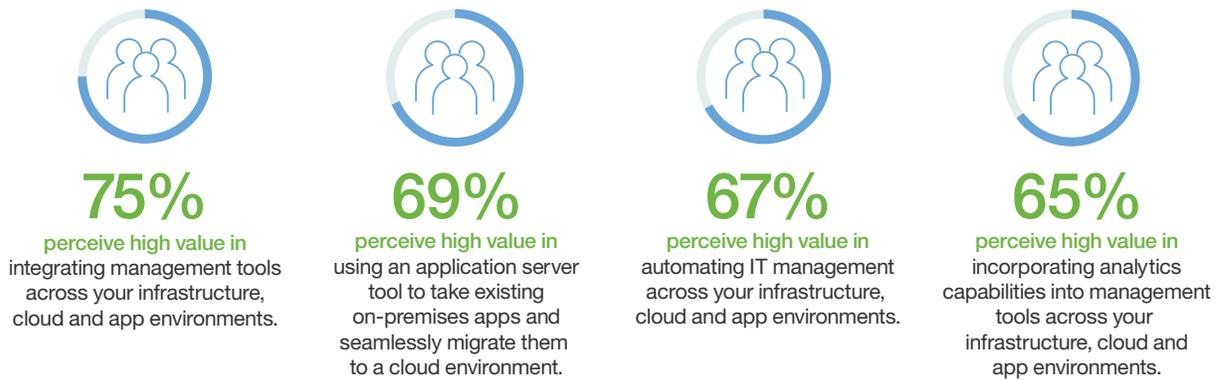across infrastructure, cloud and application environments**

75%
perceive high value in
integrating management tools
across your infrastructure,
cloud and app environments.

69%
perceive high value in
using an application server
tool to take existing
on-premises apps and
seamlessly migrate them
to a cloud environment.

67%
perceive high value in
automating IT management
across your infrastructure,
cloud and app environments.

65%
perceive high value in
incorporating analytics
capabilities into management
tools across your
infrastructure, cloud and
app environments.

Figure 3. The majority of survey respondents perceive value in what a hybrid IT management strategy can offer.

Need to launch new applications faster? Almost 70 percent of respondents say a hybrid IT management strategy helps.

Once organizations get started, a significant number report substantial benefits from adopting a hybrid IT management strategy—benefits that not only help launch new and upgraded apps more quickly, but also reduce costs, and enhance application quality, performance and customer service across the application's life cycle (see Figure 4).

**Degree to which respondents experience benefits
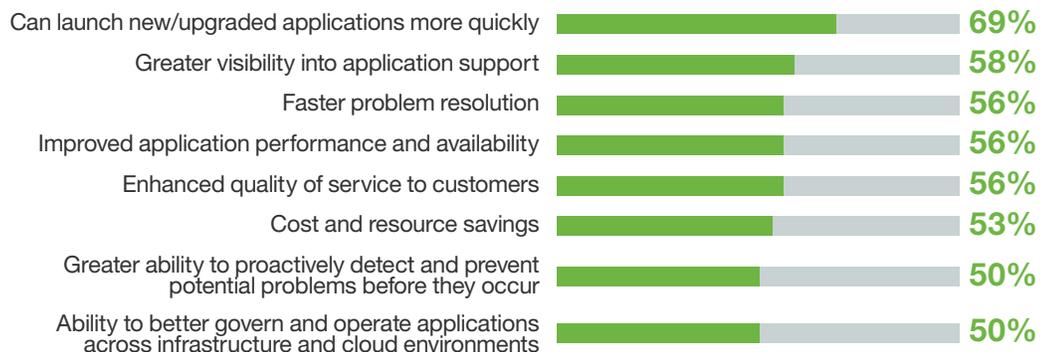from a hybrid IT management strategy**

Benefit	Percentage
Can launch new/upgraded applications more quickly	69%
Greater visibility into application support	58%
Faster problem resolution	56%
Improved application performance and availability	56%
Enhanced quality of service to customers	56%
Cost and resource savings	53%
Greater ability to proactively detect and prevent potential problems before they occur	50%
Ability to better govern and operate applications across infrastructure and cloud environments	50%

Figure 4. A significant number of respondents reported benefits from adopting a hybrid IT management strategy.

Where are you on the hybrid IT management adoption curve?

According to IBM's study, 89 percent of respondents have embarked upon the hybrid IT management journey, as shown in the adoption curve depicted in Figure 5. And 36 percent either have implemented or are currently implementing a strategy.

As organizations progress along the adoption curve, the effectiveness of the various IT hybrid management components typically meets expectations. Outcomes actually exceeded expectations for IT operations management (68 percent actual effectiveness versus 56 percent anticipated effectiveness) and Application Performance Management (59 percent actual effectiveness versus 48 percent anticipated effectiveness). Figure 6 shows adoption levels across the five components.

Where are you on the hybrid IT management adoption curve?
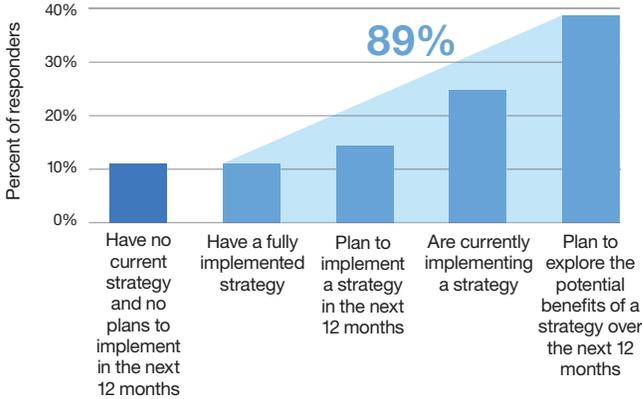
Figure 5. 89 percent of respondents have embarked upon the hybrid IT management journey.

Implementation of hybrid IT management components

	Advanced capabilities implemented	Basic capabilities implemented	Plan to implement in next 12 months	No current capabilities and no current plans to implement
Application server	29%	38%	16%	17%
IT operations management	17%	46%	22%	15%
Application Performance Management	18%	38%	20%	24%
IT operations analytics	20%	32%	28%	20%
Hybrid cloud management	8%	30%	37%	25%
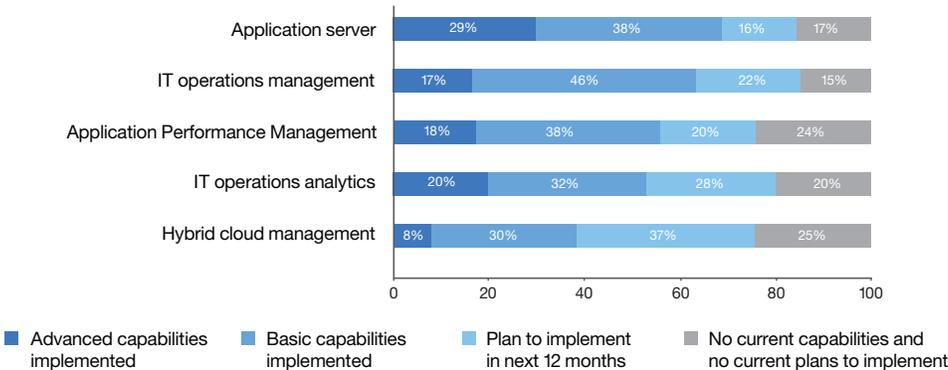
Figure 6. Adoption levels across the five components of a hybrid IT management strategy.

Start where you are with IBM hybrid IT management solutions.

No matter where you are on the hybrid IT management adoption curve, IBM can help. The company has worked with clients all over the world to integrate and automate their hybrid IT management environments—and make those environments smarter through analytics and cognitive capabilities. IBM offers robust solutions that address critical priorities around IT hybrid management challenges. These solutions are easy to use, easy to integrate and cost-effective (see Figure 7).

For organizations that have already established the "building blocks" of a hybrid IT management strategy, IBM offers solutions with open standards that are compatible with your existing IT environment. IBM starts where you are and builds from there.

Adopting a hybrid IT management strategy does not involve scrapping your existing infrastructure and systems. You can simply add a component or two that help solve your highest priority problems and build from there. Engaging with vendors and solutions that have open, flexible standards will ease integration and compatibility with your existing IT environment.

Survey respondents who are just starting out on the adoption curve consider IBM best equipped to help them with their hybrid IT management strategy. They also cite migrating applications to cloud as a top challenge—one that IBM is

Top concerns and priorities	IBM offerings
Integrating management tools across environments and improving application availability, security and performance	• Hybrid cloud management • IBM® Cloud Application Performance Management
Using an application server tool to take existing on-premises apps and seamlessly migrate them to a cloud environment	• IBM WebSphere® Application Server • IBM WebSphere® Application Server on Cloud • Application environment deployment
Automating IT management across environments	• IBM® Cloud Private • IBM Cloud Automation Manager
Incorporating analytics capabilities into management tools across environments	• IT operations management and analytics • IBM Netcool® Operations Insight

Figure 7. IBM offers cost-effective solutions that are easier to use and easier to integrate to help address critical priorities around IT hybrid management challenges.

well equipped to meet through extensive experience and time-tested strategies. From migration, deployment and beyond, IBM can assist throughout the entire application and service delivery lifecycle.

DevOps for hybrid cloud: Taking it to the next level.

Many organizations are elevating their hybrid IT management strategy with a DevOps approach that combines their development and operations solutions and teams into one streamlined, efficient organization. Learn how DevOps for hybrid cloud can help organizations succeed with digital reinvention. Read the white paper.

IBM's market leadership, depth and breadth in hybrid IT management are often cited by industry analysts. For example:

- Forrester ranked IBM as a leader in hybrid cloud management solutions[3] and hybrid integration for enterprises.[4]
- Frost & Sullivan named IBM the Cloud Company of the Year, highlighting IBM's extensive capabilities in supporting hybrid cloud environments.[5]
- TBR rated IBM #1 for hybrid environments and overall hybrid vendor adoption by customers surveyed, noting: "IBM leads overall vendor adoption due to its integrated portfolio that spans traditional software, hardware and cloud to help customers build and manage hybrid environments."[6]

And finally, almost three-quarters (72 percent) of IT operations executives surveyed consider IBM an industry leader in hybrid IT management solutions, with specific emphasis on IT operations analytics, application server and application performance management.

Interested in learning more?

- Visit the IBM Cloud Private website
- Learn more at Bridge the gap between Dev and Ops
- Take a WebSphere cloud readiness assessment
- Take an IBM DevOps self-assessment
- Try at no charge: IBM Cloud Private Community Edition

[1] Source research study data provided by IBM Market Development & Insights, 2017

[2] Minimizing the Pain of Hybrid IT Management. An Analytics-driven Approach to Hybrid IT Management Integration & Automation. An ENTERPRISE MANAGEMENT ASSOCIATES® (EMA™) White Paper Prepared for IBM April 2017. https://www-01.ibm.com/common/ssi/cgi-bin/ssialias?htmlfid=KUW12469USEN.

[3] The Forrester Wave™: Hybrid Cloud Management Solutions, Q1 2016. Tools and Technology: The Cloud Computing Playbook. January 8, 2016. https://www.forrester.com/report/The+Forrester+Wave+Hybrid+Cloud+Management+Solutions+Q1+2016/-/E-RES122813

[4] The Forrester Wave™: Hybrid Integration for Enterprises, Q4 2016. The 11 Providers That Matter Most And How They Stack Up. November 18, 2016. https://www.forrester.com/report/The+Forrester+Wave+Hybrid+Integration+For+Enterprises+Q4+2016/-/E-RES131101

[5] IBM Receives Cloud Company of the Year Award from Frost & Sullivan. Award highlights IBM's ability to deliver a complete set of cloud services enabling customers to build out their hybrid cloud environments. October 20, 2016. http://www-03.ibm.com/press/us/en/pressrelease/50833.wss

[6] TBR. 2H16 Hybrid Cloud Customer Research. December 8, 2016. http://tbri.com//index.cfm?CFID=6375847&CFTOKEN=35382094

[7] Based on internal IBM and client data. Individual results may vary.

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