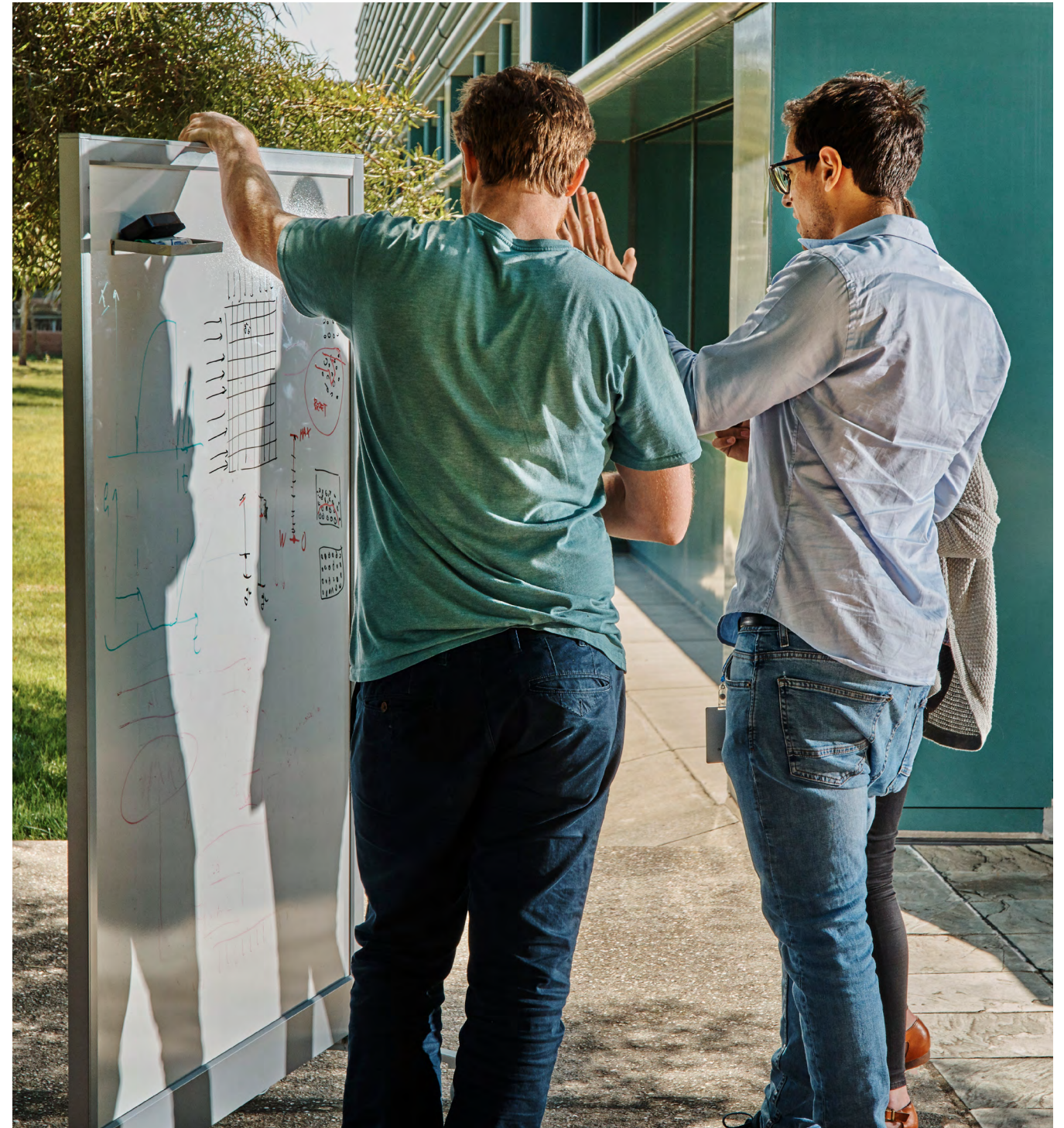


Unlock your cloud investment by transforming the way you manage applications



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# 01

## A next-gen approach to managing your hybrid multicloud environment

Hybrid multicloud environments provide myriad opportunities for organizations to consume business and technology services across an open ecosystem of partners and platforms. But as businesses fast-track digital transformation and cloud migration, they're facing growing IT complexity and need intelligent application management approaches for managing hybrid multicloud environments. IT leaders have a mandate to deliver greater efficiency, security and speed while reducing risk and lowering costs. They must simultaneously improve resilience, enhance functionality and transform the IT environment to deliver more value to the business and create a more sustainable future.



# 30%

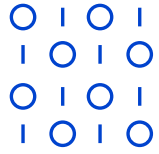
Enterprises estimate that around 30% of their cloud spend is wasted.

# 80%

Furthermore, around 80% of enterprises consider managing cloud spend a challenge.

# 70%

Thus, even though more than 70% of enterprises cite optimizing cloud spend as a major goal, realizing value remains elusive.<sup>1</sup>



Managing a hybrid multicloud environment today is no easy task. Here are a few predominant challenges organizations face:

- Rapid digitization necessitates that IT deliver greater efficiency at a reduced cost.
- Hybrid multicloud portfolios have become highly complex to manage and secure.
- As shadow IT proliferates, businesses lack full visibility into the IT environment.
- Aging applications need to be modernized to fit present and future needs.
- Developing the right mix of business and technology skills is critical for sustained innovation and growth.

According to IDC, many organizations struggle with effectively managing their applications in the cloud as well as driving the cultural and organizational change that's necessary to maximize the agility and value of managing applications in the cloud.<sup>2</sup>

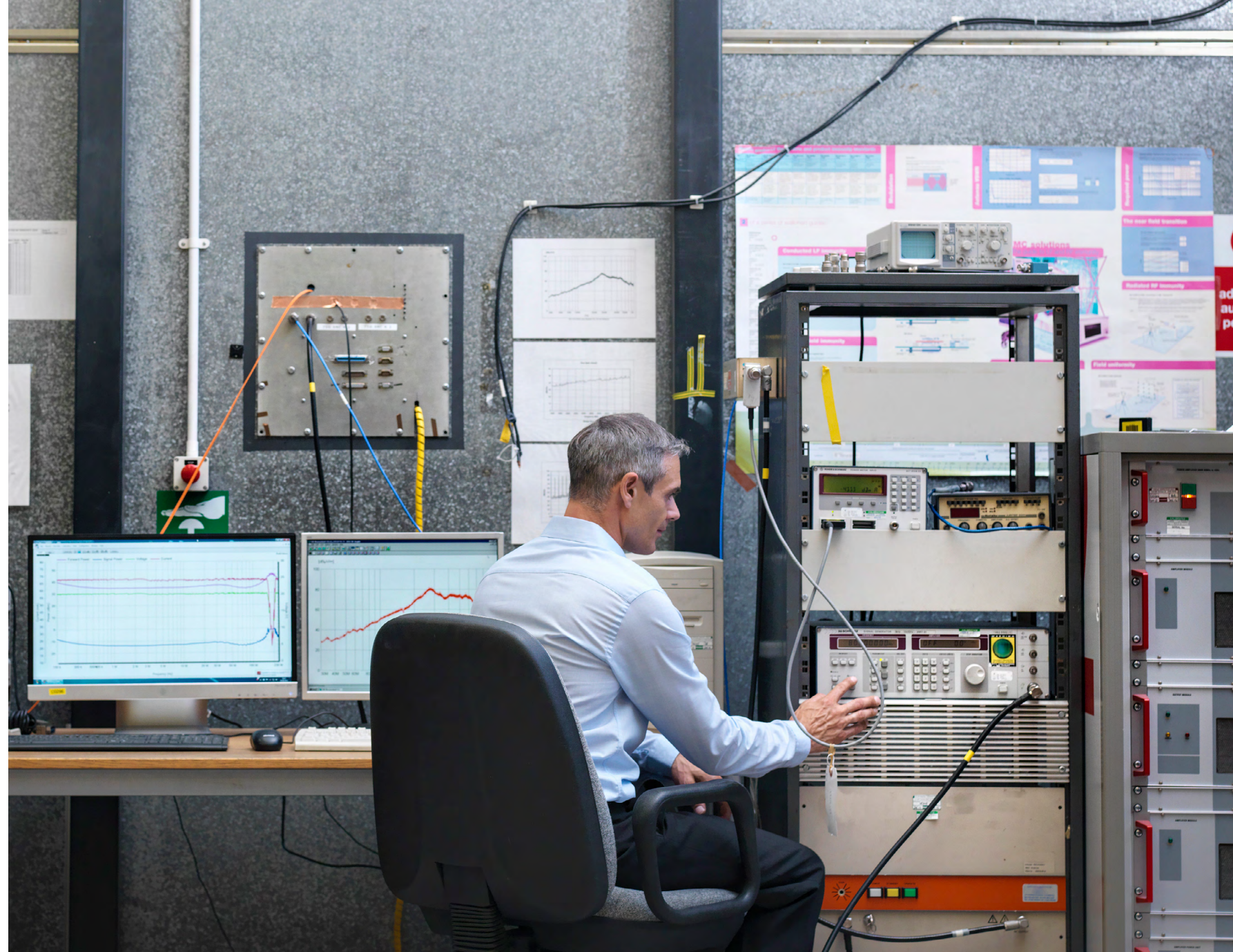
To thrive in these complex conditions, you need a clear path to elevate your hybrid multicloud application management for business transformation. Whether your business wants to improve customer experience, deploy applications faster or bolster data security, IBM Consulting™ can help with industry-leading hybrid cloud application management services (AMS) that help you optimize, automate and infuse applications with data-driven intelligence. Working side by side with IBM Consulting, you'll get a roadmap for reducing costs and accelerating time to market that takes advantage of AI and machine-learning-based automation, process transformation, DevOps and Platform Engineering Services, as well as new ways of working to unlock your cloud investment.

Is your organization ready for next-level transparency, efficiency, speed and insight that will help you drive business success? See how IBM Consulting can help.

## 02

# Evolving enterprise application management for tomorrow's business

In today's evolving IT landscape, enterprise expectations for applications are increasing. New business models require greater agility and flexibility from applications in hybrid multicloud environments. Applications are no longer just about business processes and back-end operations support; now, they're expected to be autonomous and intelligent, observable, easy to use and efficient. Not only that, but next-generation applications platform should drive sustained growth and innovation for your organization.





To stay competitive, businesses need to manage their applications in hybrid multicloud environments in a brand-new way. So, what are some of the features of next-generation AMS?

**1. Modern AMS uses automation to reduce costs and support transformation.**

Automation is an essential element of next-generation hybrid multicloud applications platform. Modern AMS provides pervasive automation to help organizations reduce costs, increase resilience and focus on growth and transformation. Automation makes life easier for IT teams, reducing manual effort and helping them discover failures before they occur instead of having to constantly respond to tickets. This approach frees your resources to focus on innovation and growth.

**2. Modern AMS decreases complexity and inefficiency.**

Every company today is operating with highly complex hybrid cloud architectures. Modern AMS needs to reduce complexity and inefficiencies by abstracting the management of the robust ecosystem of products, suppliers and partnerships required to deliver the requisite services. Through an ecosystem approach, AMS providers deliver security-rich, integrated hybrid cloud management that meets organizations where they are and helps them work smarter.

**3. Modern AMS provides observability of the IT environment.**

Managing the complexity of hybrid multicloud environments also requires the ability to see into your environment so you can proactively identify and address issues before they disrupt the business. Resilience depends on full-stack observability, and modern application management should deliver an IT “control tower” to ensure your applications platform is aligned to your business functions, needs and goals.

**4. Modern AMS reforms ways of working to help businesses sustain innovation and growth.**

The challenges of modern application environments aren’t just about the technology complexity; they’re also about how people work, how teams are aligned and what skill sets an organization has. Therefore, modern AMS involves vertically aligning teams to drive tighter integration of IT with business, development, security and operations. New ways of working set the stage for innovation and growth that carry your business into the future.

# 03

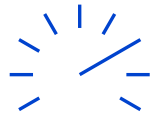
## Three vectors of holistic application management

Wherever you are in your digital transformation journey, unlocking the value of your cloud investment requires a multipronged approach. IBM Consulting has developed 3 vectors for holistic application platform management that you can undertake concurrently, depending on your specific needs and objectives. You can work on accelerating your applications platform to drive efficiency while simultaneously building in AI for deeper insights and transforming your business model to sustain future growth.





Visualizing your application management transformation journey using the framework of these 3 vectors will help you realize value faster, gain clearer insights into how to manage your portfolio efficiently and future-proof your IT ecosystem:



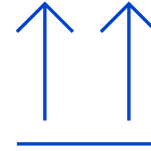
**Accelerate.**

Bring greater efficiency, resiliency and agility into your application platform environment by taking advantage of automation, DevOps, AIOps and enhanced security to boost application performance, drive efficiencies and reduce costs.



**Innovate.**

Foster innovation by gaining observability into your applications, processes, data and application platform estate using AI and machine-learning-led insights to transform siloed, inefficient workflows for increased throughput and business performance.



**Elevate.**

Enable growth and elevate experience through talent transformation and continued infusion of new technologies and ways of working, laying the foundation for modernized IT.

# 04

## Accelerate application platform operations with automation, DevOps and AIOps

Every company is looking for ways to boost efficiency and reduce costs. No one wants their IT teams to be bogged down with ticket resolution and manual tasks when they could be focusing on innovation and growth activities instead. IBM Consulting hybrid cloud application managed services employs AI and automation technologies to reduce your team’s manual effort while accelerating applications and improving their resiliency.

### Automation helps you detect and resolve issues faster.

Put robotic process automation (RPA) and cognitive solutions to work by using bots and other intelligent “digital workers” to augment your workforce. As a result, you can quickly and proactively address problems and keep your applications platform running.



79% of executives whose organizations are scaling intelligent automation expect their organization to outperform the competition in revenue growth within the next 3 years.

— IBM Institute for Business Value<sup>3</sup>

**DevOps accelerates change deployment.**

DevOps is a well-established set of practices for delivering applications quickly and with continuous improvement. Implementing DevOps in your hybrid multicloud portfolio helps you continuously deliver applications and optimize application performance, quality and security.

**AIOps, backed by SRE principles, supports proactive issue management.**

With AIOps, organizations can automate IT operations processes to help teams resolve issues before they occur. This self-healing function enables you to be proactive, implementing site reliability engineering (SRE) principles to decrease incidents and improving application platform resilience. According to research by Everest Group, 60% of surveyed enterprises are incorporating or planning to incorporate SRE as part of their next-generation AMS.<sup>4</sup>

# 90%

By 2026, 90% of global 2000 CIOs will use AIOps solutions to drive automated remediation and workload placement decisions that include cost and performance metrics, improving resiliency and agility.

— IDC FutureScape<sup>5</sup>

Having more control over incident response and application performance greatly reduces the risk of costly unplanned downtime which could ultimately help improve customer experience.<sup>6</sup>

As business operations and the degree of competition scale up, they drive demand for better quality, speed to market and cost competitiveness. In turn, these demands directly translate to increased pressure on enterprise IT, because it would be prohibitively slow and expensive for IT professionals to respond personally to each issue that arises. Fortunately, the next evolution of IT can relieve these pressures by applying AI and analytics to the IT lifecycle.

With the advent of advanced operating models like agile and DevOps, we have seen a counterbalance of complexity with aspects of solution reliability, cost competitiveness, quality and speed. This provides us a strong baseline to build upon and elevate every DevOps practice to the next level.

If you're looking to accelerate applications that help you run your business, IBM Consulting hybrid cloud application managed services can help. Our IBM Exponential AI Framework provides a holistic integrated baseline for AI Powered DevOps and Solution Operations based on a standard operating model that is enterprise scalable, based on proven best practices and promotes pattern re-usability. Customized solutions are built based on this framework for every kind of business requirement to achieve the most optimized solution to cater to the business requirements.

# 05

## Innovate processes through observability and process mining

Application platform management is about much more than just optimizing its performance. It's also about transforming processes and gathering insights that drive innovation for the business. In a tightly competitive marketplace, organizations are eager to differentiate themselves through innovative products and solutions that deliver business value. IBM Consulting hybrid cloud application managed services help you gain insight into your IT estate and business processes so that you can elevate system performance, remove bottlenecks and streamline your operations.



**An IT control tower provides visibility into your whole IT estate.**

Today's hybrid and multicloud architectures are highly complex. Application performance monitoring (APM) and application resource management (ARM) tools are designed to give you real-time visibility into your application environment to help you respond to incidents faster and assure optimal application performance. IBM Consulting takes advantage of cutting-edge observability and application resourcing technologies — along with AIOps — to give you a holistic view of your IT and empower your teams to take meaningful action.

**Process mining helps you discover and act quickly on process bottlenecks to drive continuous operational improvement.**

IT and business processes can be a source of inefficiency that hinders innovation and growth. Process mining helps you understand business-critical workflows, identify weaknesses and bottlenecks in your application landscape, and determine where automation can help you streamline for greater efficiency. By taking advantage of process mining, you can attain continuous, data-driven process improvements and monitoring throughout your business and free employees for more growth-oriented tasks.



# 25%

By 2024, 25% of global enterprises will have embraced process mining as a step up to autonomic business.<sup>7</sup>



**The IBM Garage method helps you align the organization around shared objectives.**

Innovation also necessitates a shared vision and purpose across an organization. Too often, business units operate in silos, with separate requirements, budgets and priorities. Because the IBM Garage Methodology is built on co-creation, co-execution and co-operation, it helps IT teams and business leaders align around shared objectives to accelerate innovation. This approach helps your team shift from IT service-level agreements (SLAs) to business SLAs.

If you're looking for ways to unlock innovation by improving application performance and business processes, IBM Consulting can help. Next-generation AMS from IBM will give you not just visibility into but observability of your IT estate, leading to insights that help you raise the bar on system performance, which in turn reveals new value streams that generate business results.

# 06

## Elevate experience through future-ready architectures and talent transformation

Accelerating application platform operations and transforming processes gives your organization a foundation and framework on which to build a vision for the Cognitive Enterprise™ — the business of the future that harnesses cutting-edge technology to elevate experience and drive growth. IBM Consulting offers a range of next-generation hybrid cloud AMS capabilities and tools that empower you to unlock the value of your hybrid cloud estate.

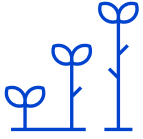




The convergence of new exponential technologies, such as AI, automation, IoT, blockchain and 5G, have the power to change business models, reinvent processes and reimagine the way we all work. We call this the emergence of the Cognitive Enterprise.<sup>8</sup>

**A modernization roadmap, based on application insights, enables strategic transformation.**

Employing automation, analytics, AIOps and observability tools gives your organization powerful insight into your IT estate that can be used to drive strategic transformation. Whether you want to be more agile, go to market with new solutions faster, reduce infrastructure spending, increase revenue or reduce technical debt, you need a modernization roadmap to show you how you'll get there. IBM Consulting learns your hybrid cloud estate inside and out to help you build a transformation roadmap aligned to your desired business outcomes, using outcome-oriented assessments and insights.



**Talent transformation and new ways of working help you nurture an innovation culture that endures.**

Cultural change is a critical component of business transformation. Businesses not only need the right talent; they need ways of working that nurture innovation. IBM helps you identify skills gaps so you can target the future-pointing talent your organization needs. And IBM Garage teaches new ways of working that break down enterprise silos and nurture a unified approach to innovation.

**IBM Garage clients experience 10 times more innovative ideas, 67% faster speed to outcomes and 102% ROI.<sup>9</sup>**

**Utilizing a wide range of technologies and services creates a pathway to unlocking value.**

Today's technology investments pave the way for the future of your business. IBM Consulting delivers next-generation AMS for hybrid cloud that helps organizations accelerate their digital transformation and elevate enterprise experience to unlock value. If you're ready to fast-track your evolution toward becoming a Cognitive Enterprise, you can accelerate that transformation together with IBM Consulting.

IBM Consulting hybrid cloud application managed services can help you establish a foundation for strategic transformation and business growth.

# 07

## Achieve higher value with IBM hybrid cloud application managed services

Whether you're trying to accelerate application platform operations, innovate processes, elevate experience or all 3 simultaneously, IBM Consulting has the expertise and tools to help you unlock value from your IT investments. The IBM Consulting hybrid cloud application managed services capability framework is backed by an integrated suite of tools and methods and supported by deep industry expertise.



Using this framework, IBM Consulting works together with your teams in real time to help you address:

AIOps — to mitigate vulnerability threats, self-heal, improve MTTR, reduce unplanned downtime

SRE — to eliminate performance bottleneck, detect anomalies, create runbook

Platform Engineering — to provision faster, increase resiliency and cost saving

Testing — to improve time to market

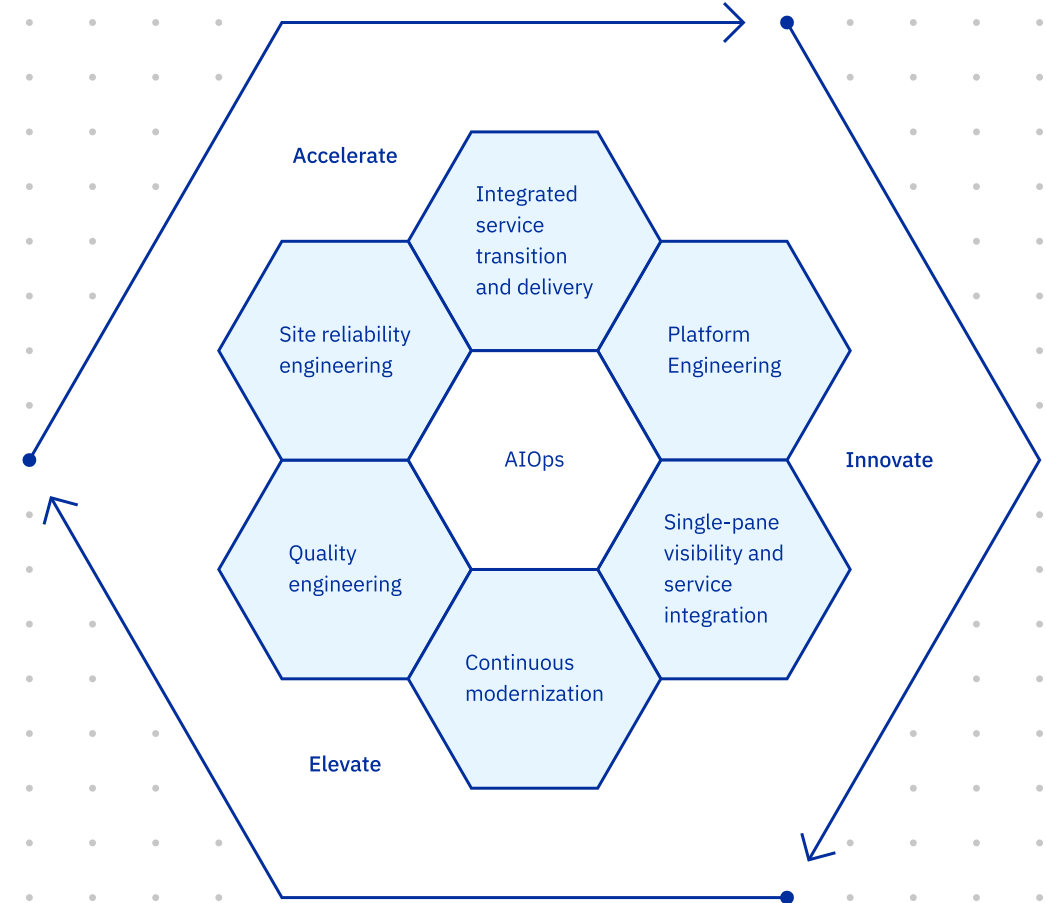
Integration — to enhance end-to-end service management agility

Talent transformation — to work in agile, integrated ways

Continuous modernization — to elevate the value of your cloud footprint

What's more, IBM Consulting services are backed by the entire IBM portfolio and ecosystem, spanning systems and research, security and cloud solutions. By bringing all of IBM's assets to bear in enabling solutions for clients, IBM Consulting helps you work smarter and faster — so you can lead in the evolving world of cloud through improved transparency, speed, efficiency and resiliency. Put simply, the approach IBM Consulting uses can help you free up budget and resources so you can focus on achieving your business goals.

To find out more about application managed services for hybrid cloud, talk to your IBM account manager to schedule a discussion with our experts, or explore IBM capabilities for smarter application management at [ibm.com/applications](https://ibm.com/applications).



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