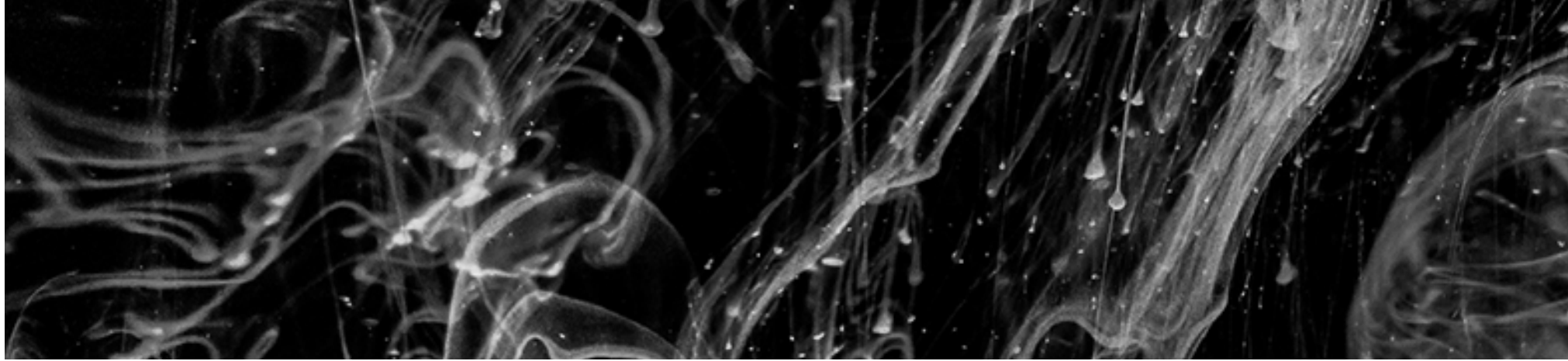


# The Complete Guide to Modern IT Operations

Insight<sup>®</sup> 





## Let's start with a look at the landscape.

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IT environments are extremely diverse — a complex blend of platforms, workloads, technologies, data, integrations, user groups, and so on.

Silos are commonplace. In many cases, infrastructure and development teams maintain more distance than ever before, thanks to the existence of cloud and the options it presents to developers.

The threat surface is growing in tandem with IT environments. Security gaps occur and are exploited constantly, while security teams struggle to ascertain real threats from a cacophony of alert “noise.”

An MIT survey reveals that organizations are taking many different approaches to modern architecture, with **roughly half deploying APIs, containers, or serverless architecture.**<sup>1</sup>

**9 out of 10**

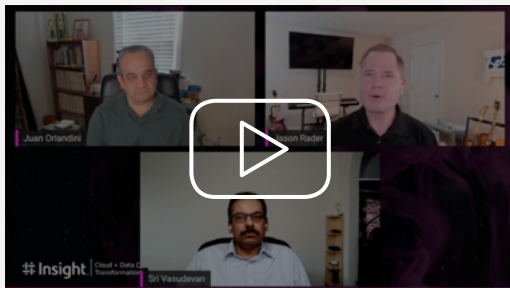
respondents said they are trying to move to the cloud to run as quickly as business objectives require.<sup>1</sup>

**Organizations reported they only deal with 4% of issues found in production**

because of the increased complexity of cloud-based IT systems, thus creating new security gaps.<sup>2</sup>

Some may say these issues are necessary evils that come with running a business today. But the fact remains: Organizations that are nimble and have the platforms and processes to support agility are best positioned for success.

So, something's got to give. The solution? Modern IT operations. Here, we'll outline what it is, how to achieve it, and the key benefits it provides.



## Modern IT Operations: Bringing It All Together

Learn what's fueling the movement for modern IT operations — and what it can deliver.

[Watch the webinar](#)

## What is modern IT operations?

Renowned business expert Peter Drucker said, “The greatest danger in times of turbulence is not the turbulence — it is to act with yesterday’s logic.”

If organizations weren’t already feeling pressured to innovate, generate new revenue streams, present fresh user experiences, and solve new problems, today’s economic environment has increased the stakes and should inspire new approaches.

Modern IT operations is such a path. Organizations that adopt it can drive results aligned to developer needs and pave the path to business transformation.

### This means:



Shifting to modern and hybrid platforms in order to embrace cloud, multicloud, and DevOps strategies



Adopting automation, tool sets, monitoring, and efficient workflows



Bridging gaps between internal groups so IT operations can deliver what developers need

What’s critical is the balance between innovation and governance. Or, otherwise stated, speed and controls.

It is essential for a business to innovate and move quickly. Customers need solutions, stakeholders need results, and boards of directors need assurance. Market share is a priority, as is maintaining a competitive stance.

But moving too quickly brings perils that could otherwise be avoided, such as security exposure and technical debt.



67%

of issues that arise when provisioning and managing infrastructure as code constituted high severity risks,

such as open security groups, overly permissive IAM roles, and exposed cloud storage services.<sup>2</sup>

This is a dance between developers and IT/infrastructure teams that has been perpetuated by the presence of cloud.

In years past, if developers had a need, their sole option was to work with IT to realize their vision. Today, if IT is perceived as being an obstacle to a development project, developers can simply build in the cloud without IT having any part in it. While the business may experience gains from this type of shadow IT in the short term, issues mount and must be dealt with eventually.

Through adopting modern IT operations, businesses can ensure the right balance between governance and innovation in the march toward releasing new apps and digital transformation without causing breaches, cost overruns, or other problems down the line.





## Tactics and key topics

Modern IT operations encompasses a range of tactics and focus areas, each of which has a unique place in the modern IT operations ecosystem and in your environment.

### Automation

For years, IT administrators have leveraged automation to simplify how repeatable tasks are performed. While it isn't a new concept, it's one that's gotten a lot of attention lately.

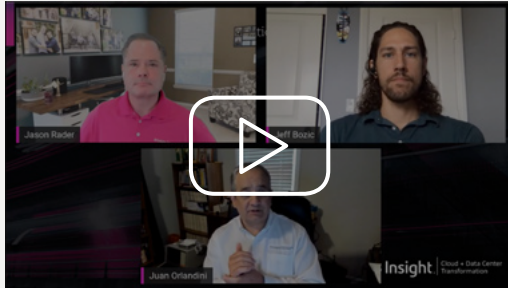
Why? Automating tasks saves time and money and improves consistency. The alternative is manual, human-centered workflows that can be complicated, lengthy, and error-prone. When a company needs to scale — or respond to mandates that require social distancing — automation can be a business-saver.

Automation is integral to process modernization, Artificial Intelligence (AI) and robotics, DevOps, and much more. It can be applied from the cloud, to multicloud, to on-premises. It's used to reduce toil and refocus resources on higher-value activities.

Today, the entire pipeline from IT operations to app development can be automated. To support modern IT operations, it's key to use automation strategically. Not everything is well-suited for automation and doing so can be resource-intensive. Ask questions such as:

- Why are we automating?
- What need are we addressing?
- What value or benefits are we hoping to see?
- How will we measure outcomes?

For more on best practices when using automation, explore the whitepaper "[Ready to Modernize IT? Start With Automation.](#)"



### Strengthening Your Modernization Strategy With Automation

Get expert insights and tips on how to use automation to your advantage in this LinkedIn Live session.

[Watch the webcast](#)

## Modern platforms

Legacy IT operations were built around on-premises data centers with limited scale, capacity, and bandwidth; the need for in-house maintenance; more predictable refresh cycles; more hardware; and slower development processes.

Jumping to the present, most companies can no longer operate solely in this way. Speed is an asset and an enabler of competitive gains and differentiation in the market. While costs, security, and compliance remain critical, advancing the business and user experience are what guarantee business viability.

The cloud in all its variations — public cloud, private cloud, hybrid cloud, and multicloud (more than one public cloud) — is both the force behind and the solution to the need for speed and flexibility.

Of utmost importance today is determining the most effective cloud strategy, reiteratively aligning workloads and platforms, and establishing cloud governance.

Modern IT operations cannot be achieved if platforms are not properly selected, monitored, and managed. Again, this is about finding that balance between innovation and governance — less, significant issues will surface.

## Where is the cloud evolution today?



81%

of organizations are already using cloud computing or have applications in the cloud.

## Cloud adoption has reached more than 2/3 in every industry:



Education (88%)



Manufacturing (87%)



Healthcare (86%)



Financial services (75%)



Government/Nonprofit (71%)

IT decision-makers expect to allocate

32% of their total IT budget

to cloud computing in the next year.<sup>3</sup>



## New technologies

When working toward modern IT operations, the driving question is: What can be implemented to support the overarching strategy? There are many technologies to consider.

For some organizations, it will make sense to embrace a container strategy. Although not ideal for every workload or use case, containers have great potential to support fast and flexible development with the added bonus of portability, which can be harder to realize with cloud-native or monolithic applications.

New workloads are a key driver of containers, particularly those that need to scale to an unknown size or be moved from cloud to on-premises or vice versa. For example, a new mobile app may wind up with 10 users or 10,000 users and therefore has storage needs and costs that are hard to predict. Containers may be useful in such a scenario.

IT decision-makers may also explore solutions like unikernels, Kubernetes, or middleware. Virtualized infrastructure such as VDI can support modern IT operations.

With any newer technology deployed, the complete pipeline — from IT to application development — and management expectations are key considerations.



## Client story: Investment Management Company

Although this company was on a well-defined hybrid multicloud journey and focused on building a container architecture, it desperately needed to optimize its investments and evolve its IT operations. The company was able to realize:

- A three-year annual microservices consumption growth path
- Improved governance, controls, and management
- Fully automated infrastructure provisioning

[Learn more](#)

## DevOps, people, and processes

Whether or not your organization is pursuing DevOps, the ideas behind DevOps are tightly aligned with modern IT operations.

The shared ambition is creating a developer-friendly environment. Automation, modern platforms, and new technologies are pieces to this puzzle. But what else is essential?



**Collaboration between  
infrastructure and  
development teams**



**Defined, repeatable, and  
efficient processes for  
provisioning, deployment,  
and testing**



**Commitment to purpose  
and solving for user needs**

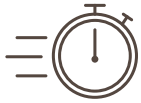
Getting sponsorship and buy-in at the executive level is a good first step. Successful organizations will also bring IT and developers together to strategize and make decisions at the same table.



## Valuable outcomes

Modern IT operations has real-world applications and business value.

Organizations that are able to successfully adopt modern IT operations will experience:



### Increased agility

What are your customers (external and internal) asking for? How are you meeting demand? What market or industry changes does your company need to prepare for? Rise to the occasions, reacting with ease, scaling seamlessly, and putting new initiatives into motion for future benefit.



### Fast time to value

See an opportunity and capitalize on it more quickly than ever before. Build new applications and solutions with all hands on deck and the right technologies and modern infrastructure to support continued success. Create data-driven solutions and leverage analytics to advance the business.



### Optimized resources

Make intelligent use of the resources you have today and better understand what you may require in the future. From financial resources to human capital and infrastructure, modern IT operations supports maximizing your assets and making strategic investments.



### Better business continuity

There is no value in barreling ahead if the wheels are falling off and the lights are out. In finding that balance between speed and controls, unfettered innovation and governance, your business ensures security, data protection, compliance — and its ability to keep going.

Agility improves financial performance by

**20–30%<sup>4</sup>**



**Fast organizations outperform others by a wide margin on a range of outcomes,**

including profitability, operational resilience, organizational health, and growth.<sup>5</sup>



of technology leaders feel they are expected to be change instigators.<sup>6</sup>



**More than  
4 out of 10**

tech vanguard organizations are focusing transformation efforts on overhauling the operating model.<sup>6</sup>

## Put ideas into action

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If you're like most leaders, you already have an idea of what you need to do next. The ideas presented in this guide may have helped that vision become even more well-defined.

### How can we help?

Insight can help IT operations deliver what developers are looking for — and, ultimately, drive strategy, design, and implementation of modern solutions to lay the groundwork for transformation.

Learn more at [solutions.insight.com/catalyst-of-change](https://solutions.insight.com/catalyst-of-change).





[solutions.insight.com](https://solutions.insight.com) | [insight.com](https://insight.com)

Sources:

<sup>1</sup> MIT Technology Review Insights. (2020, June 25). Cloud and complexity in IT. Produced in association with TIBCO.

<sup>2</sup> Accurics. (2020). The State of DevSecOps Report – Spring 2020.

<sup>3</sup> IDG. (2020, June 8). 2020 Cloud Computing Study.

<sup>4</sup> Aghina, W., Handscomb, C., Ludolph, J., Rona, D., and West, D. (2020, March 20). Enterprise agility: Buzz or business impact? McKinsey & Company.

<sup>5</sup> De Smet, A., Mygatt, E., Sheikh, I., and Weddle, B. (2020, Sept. 9). The need for speed in the post-COVID-19 era – and how to achieve it. McKinsey & Company.

<sup>6</sup> Briggs, B., Buchholz, S., Kark, K., Lillie, M., Nguyen Phillips, A., and Tweardy, J. (2020, May 18). The kinetic leader: Boldly reinventing the enterprise. Deloitte Insights.