# The 2021 State of Digital Operations Management

How IT Leaders Can Drive Faster Recovery in a Post-Pandemic World





a Hewlett Packard Enterprise company

## >>> Executive Summary

The year 2020 was characterized by frequent lockdowns, strict social distancing norms, and unexpected pivots in business strategy. Enterprises shifted to digitalfirst, cloud-centric, and remote work mandates to grow market share, stabilize operations, and increase customer relevance. While the pandemic reduced global IT investments by 2.2% in 2020, worldwide technology spending in 2021 <u>will increase to \$4 trillion</u>, for overall annual growth of 8.4%.

As we enter the post-pandemic era, which technology investments will rise to the top in 2021? IDG's 2021 State of the CIO survey finds that IT leaders are prioritizing data and business analytics (39%), security and risk management (37%), and cloud-based enterprise applications (32%) initiatives. More importantly, 82% of technology executives believe the pandemic has driven the adoption of new technologies, IT strategies, and methodologies. The 2021 State of Digital Operations Management survey looks at the specific factors constraining organizational innovation and the steps technology leaders are taking to unleash disciplined creativity across their extended teams. The study shares how strategies such as tool modernization and legacy portfolio rationalization and technology investments such as AIOps and digital operations management platforms can unlock value and drive differentiation in a competitive market.

#### Methodology

A third party surveyed a total of 132 respondents in March 2021. All respondents work at the IT director level or above, across IT/technology operations teams in the United States. Enterprises surveyed have more than 500 employees and spent at least \$5 million in annual technology budgets.





## How Artificial Intelligence is Changing IT Operations as We Know It



There has been constant innovation in the IT operations management (ITOM) market as both incumbents and startups release new tools for age-old problems as well as modern use cases. Tool rationalization is top of mind for IT leaders as enterprises look to get rid of legacy toolchains. Artificial intelligence for IT operations (AIOps) has emerged as an influential force driving consolidated insights across diverse tools.



#### Number of IT Operations Tools in Use



#### Market Innovation as a Proxy for Tool Sprawl

Over the last decade, there has been an explosion of new categories of IT operations management tools. Observability, AlOps, chaos engineering, value stream management, and <u>FinOps</u> tools were not on the radar of most IT teams five years ago. The AlOps and Observability market alone is expected to grow to <u>\$17 billion per</u> year, as organizations struggle to maintain modern services built on microservices and containerized workloads.

The OpsRamp survey shows that tool proliferation is both a blessing and a curse for enterprise IT teams. Half (50%) of survey respondents typically use more than five tools in their daily operations while 45% work with more than 10 different tools across their entire hybrid IT environment. While there is a compelling case for discarding outdated tools, technology practitioners will keep investing in innovative tools that can effectively manage and optimize their legacy and modern infrastructure.



#### Modernizing Legacy Monitoring Is a Must for Operational Agility

Legacy monitoring approaches have short-circuited IT's ability to ensure resilient and high-performing infrastructure that can keep up with the demands of digital transformation. A recent <u>451 Research</u> <u>report</u> found that only 11% of technology teams are happy with their current monitoring solutions and around 44% are looking to actively replace their existing tools within a year.

Our survey confirms that there's ample room for improvement in ITOps toolsets. Half of IT leaders are satisfied with their current monitoring tools (probably because they have adopted modern tooling) while the remaining half is not happy with their existing monitoring solutions. IT teams should immediately look to modernize their legacy tools to gain comprehensive capabilities for monitoring hybrid, multi-cloud, and cloud native infrastructure; integrating data and automating incident response; and supporting business goals with big data analytics.

#### Satisfaction with Current Monitoring/Operations Tools





#### **Plans for Tools Rationalization**



#### Optimize Effort and Save Money with Tool Portfolio Rationalization

Our survey finds that tool portfolio rationalization is high on the agenda of IT decision-makers. Tool consolidation is a great way to get rid of fragmented tools with redundant capabilities and drive quicker mean time to recovery with faster problem resolution. Enterprise IT teams that fix their tool sprawl issues can lower maintenance costs by not having to support a complex array of tools and address visibility gaps for hybrid infrastructure by unifying data silos.

More than half (55%) of respondents expect to eliminate over 50% of their existing tools while 17% are looking to cut at least 25% of their IT operations tools. IT teams should look at how their business and technological needs are changing, determine which of their current tools align with organizational priorities, and then retire or swap out specific tools that are no longer needed.



#### Delivering Compelling Digital Experiences With the Right Tools

Covid-19 compelled business leaders to focus on curating outstanding digital experiences for their customers, employees, and partners. A <u>McKinsey Global survey</u> of business leaders reports that the pandemic has accelerated digital customer offerings by an average of seven years.

In 2021, technology executives have prioritized ITOM tool investments such as digital experience monitoring (48%), cloud native observability (47%), and application performance monitoring (45%). These investments are critical for delivering solid end-user experiences across web and mobile applications while helping isolate and fix performance problems across on-prem and cloud infrastructure. This is consistent with the shift where IT operations teams are focusing more on building scalable application architectures and less on optimizing the infrastructure layer itself.





#### **Focus Areas for Tools Consolidation**



#### AlOps Addresses The Challenges of Siloed Operations

Disconnected tools covering discrete areas of operations such as compute, storage, database, and networking have historically created problems for hybrid infrastructure management, making it difficult to assess the health and performance of an IT service. AlOps platforms emerged to help IT teams identify, diagnose, and recover from high-severity incidents by combining historical and real-time data. AlOps can act as connective tissue for centralized operations by delivering proactive insights across different IT monitoring, service management, and process automation tools.

Our survey shows AlOps (63%) is a focus area for consolidating insights from different IT infrastructure management tools, followed by network performance monitoring (48%) and digital experience monitoring (47%). IT teams can use AlOps to create a big data platform that analyzes large volumes of data across domain-centric tools and delivers relevant insights for immediate action when an issue occurs.



# Drive Agility and Innovation with AI/ML-Powered Insights

Research firm IDC expects that 50% of large enterprises in 2024 will adopt AIOps for automating and optimizing their technology operations. Our survey shows 58% of IT decisionmakers have already deployed AIOps in their organization. Meanwhile, 37% plan to roll out AIOps this year while only 5% have no intention of using AIOps in 2021.

#### **Business Goals Driving AlOps Implementation**





What factors are driving this uptick in AlOps interest among IT operations teams? The three leading reasons for AlOps implementations include the ability to address problems quickly (70%), drive faster response times for business needs (61%), and gain real-time insights for digital infrastructure management (61%).



## INSIGHT #2

# The Mandate for IT Operations Modernization

What modern practices, tools, and approaches can IT infrastructure leaders use to drive sustainable change in their organizations? Our survey throws light on specific roadblocks that are holding back progress, what it takes to build specific competencies to handle business demands, and why investing in a modern digital operations management platform is a transformational exercise.





#### What Stops IT Organizations from Innovating?

IT teams have had to support a massive spurt in <u>digital transformation</u> initiatives coupled with a steady shift of <u>on-prem workloads to cloud</u> and <u>cloud native architectures</u>. Technology leaders have needed to create a tricky balance between supporting critical business goals while maintaining fiscal and operational discipline.

55%

IT executives ranked the pace of technological innovation (55%), legacy toolsets (42%), and siloed organizational structures (40%) as the biggest impediments to agile and effective IT operations. Technology decision-makers should make it a priority to roll out bootcamps and certification programs to help employees keep up with technological change, invest in modern platforms to counteract technical debt, and drive cross-functional collaboration using shared objectives/OKRs across different teams.





#### **Biggest Barriers to Meeting Organizational Goals**

# Invest in Specific Operational Capabilities to Build Organizational Muscle

In 2021, 55% of IT leaders expect to increase their full-time employee count to handle the demands of cybersecurity, hyperautomation, cloud adoption, and remote work. Given the urgency with which enterprises have embraced digitization, IT teams need to invest in the right capabilities needed to deliver resilient infrastructure services for a wide variety of business needs.

56%

Here are the three IT operations approaches ranked most critical by executives:

- Data/visibility (57%) refers to the need for bringing IT operations data together across domains such as application, compute, network, storage, cloud, and on-prem as well as data formats such as metrics, logs, and traces.
- **Collaboration (56%)** is about creating a shared ownership model for different operations teams such as IT operations, security operations, and DevOps.
- **Processes (49%)** are critical for integrating and streamlining organizational workflows for operational tasks such as provisioning, configuring, monitoring, alerting, and decommissioning across different business units.



#### **Critical IT Operations Capabilities**

57%

#### Key Requirements for a Modern IT Operations Solution

59%

The demands on modern IT operations solutions have never been higher. Enterprise IT teams need technology platforms that can capture real-time telemetry for a wide variety of infrastructure environments, offer the ability to scale with demand, provide chargeback and capacity recommendations to optimize infrastructure, and deliver algorithmic insights for troubleshooting and repairing IT services. Given the fallout of the SolarWinds sunburst supply chain attack, the OpsRamp survey shows that platform security (59%) which is the ability to withstand sophisticated attacks is the most critical attribute of a modern solution. The next two top capabilities include hybrid infrastructure management (52%) for controlling the chaos of distributed architectures and flexible price offerings (37%) that offer clear and compelling business value at a competitive price point.





#### **Critical Attributes of a Modern IT Ops Solution**

#### Value of a Digital Operations Management Platform



#### The Emergence of Digital Operations Management Platforms

A digital operations management platform brings together diverse data sources, optimizes organizational processes, and uses analytics to drive innovation and agility across the organization. Given the volume, velocity, and variety of system events that occur daily, IT teams need a digital operations management platform that can reduce repetitive alerts, identify the proximate cause(s) for an IT outage, and ensure compelling user experiences using AI/ML.

A majority of technology leaders see value in deploying a digital operations management platform with capabilities in hybrid, multi-cloud, and cloud native monitoring, which supports intelligent incident management and automated remediation, and which integrates with their existing tools in a single place. Seventy-three percent of respondents expect to roll out a digital operations management platform in 2021 while 21% expressed interest in purchasing a modern platform if no budgetary constraints were holding them back.



#### Why Invest in a Digital Operations Management Platform

While technology practitioners have long tried to find a <u>single pane</u> of glass (SPOG) for IT operations, they've usually ended up with a single glass of pain due to the duct-taped nature of legacy ITOM suites that failed to deliver that single, centralized view. Modern digital operations management platforms are different as they combine data, analytics, and workflows to offer relevant insights into an organization's hybrid IT ecosystem.



#### Why Implement a Digital Operations Management Platform

IT leaders plan to roll out a digital operations management platform for:

- **Deploying automation and AlOps (51%)** so that IT teams can use machine learning algorithms and process automation to reliably cut down alert noise, drive faster root cause identification, and handle repetitive activities.
- Driving agility and faster resolution (46%) with a single source of truth for incident response so that IT teams have the right situational context.
- Saving time and money (41%) by eliminating the need to switch between multiple tools and by swapping out costly, legacy IT management tools.



### >> Conclusion

Here are three key takeaways from the 'The State of Digital Operations Management' report for enterprise IT teams as they deal with the profound implications of the next normal of 2021 and beyond:

## Digital transformation demands new tooling

The ITOM tools category has seen new solutions emerge to address the complexities of managing cloud native infrastructure, delivering seamless digital experiences, ensuring infrastructure resilience, and keeping a tight lid on public cloud expenditure. IT leaders have budgeted for investing in digital experience monitoring, cloud native observability, and application performance monitoring tools to meet the challenges and opportunities unleashed by digital transformation.

## Keeping up with modern infrastructure

Bringing in a new tool requires significant efforts in training and upskilling of team members, tweaking organizational processes, and securing budget commitments. Few IT teams would take on the burden of deploying a new solution unless there is a clear payoff in terms of return on investment, freeing up organizational resources, and retiring technical debt. IT teams are adopting innovative tools to handle the demands of distributed workloads with data-driven insights, contextual recommendations, and reduction of repetitive tasks.

#### Why digital operations management platforms are a game-changer

Nearly all (94%) of IT executives have either decided to invest or would like to invest in a digital operations management platform to centralize insights for hybrid infrastructure, enable rapid restoration of missioncritical services, and drive greater efficiencies by reducing context switching across multiple tools. Digital operations management platforms deliver unified visibility, time and cost savings, and rapid resolution with algorithmic insights and proactive automation.





OpsRamp is a digital operations management software company whose SaaS platform is used by enterprise IT teams to monitor and manage their cloud and on-premises infrastructure. Key capabilities of the OpsRamp platform include hybrid infrastructure discovery and monitoring, event and incident management, and remediation and automation, all of which are powered by artificial intelligence.







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