Five-Step Buyer's Guide to Modern IT Operations Management

Best Practices, Checklists and Management Resources

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Get Started

Want to change your IT operations management approach but don't know where to start? The most comprehensive evaluations start by taking a closer look at the capabilities of your current tools as well as learning about modern operations models and technologies. Then it's important to uncover and address any potential cultural or organizational skill-set and process shortcomings before embarking on new digital transformation initiatives.

"Chart your roadmap to successful transformation with our five-step approach."

PEOPLE
4. IDENTIFY

TECHNOLOGY
1. ASSESS
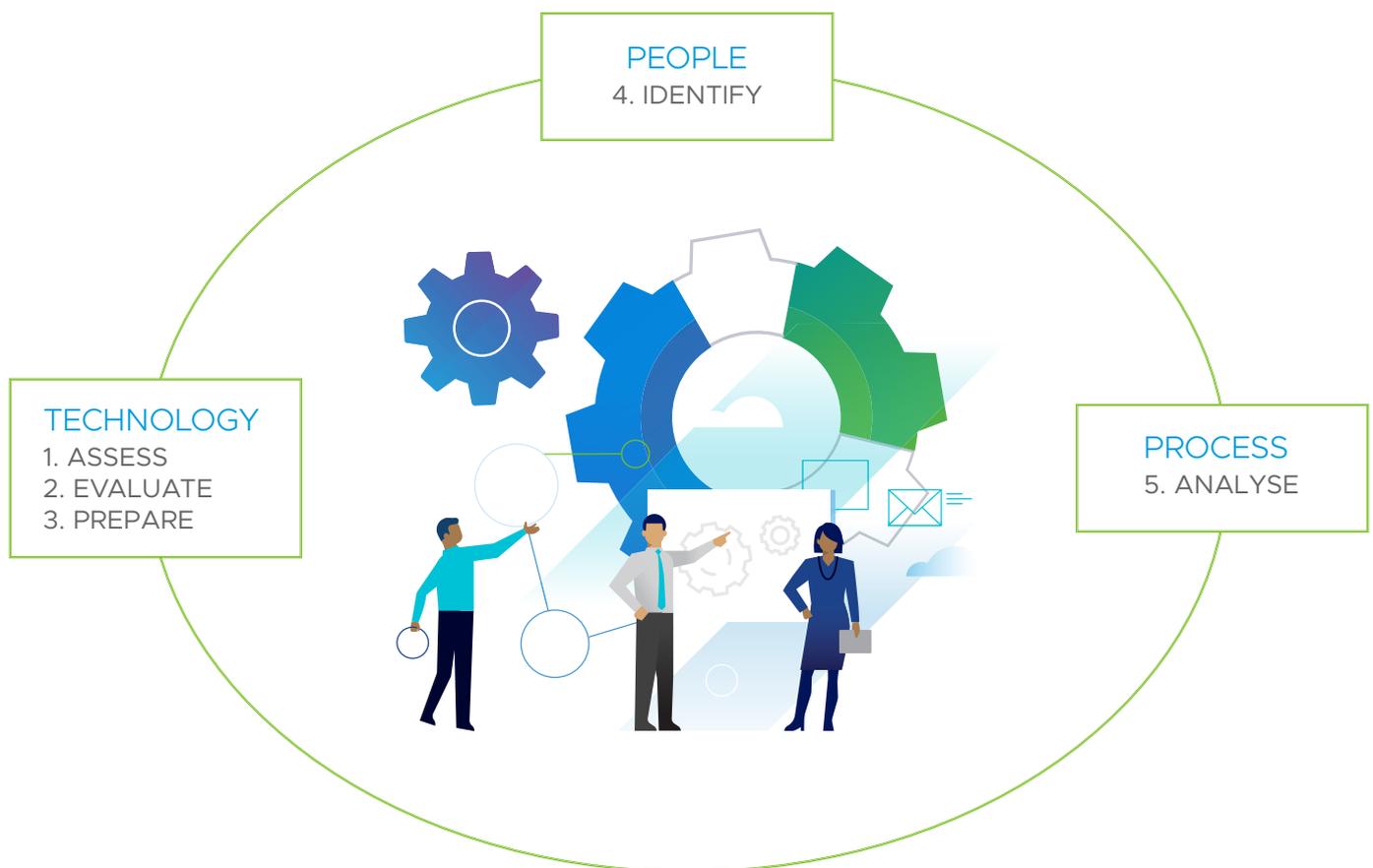2. EVALUATE
3. PREPARE

PROCESS
5. ANALYSE

Chart your roadmap to successful IT transformation with these five steps to help narrow your choices and discover both what's possible and what's best for your digital business. Steps 1–3 help you assess and compare technology capabilities, while steps 4 and 5 help evaluate your staff skills and processes internally using complementary guidance from industry leaders.

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1 Assess: Current IT Operations Management Solution Challenges

Before shopping around, it's important to understand the shortcomings of your current approach. Take a minute to review Table 1, which outlines the most common IT operations challenges. If you answer yes to three or more issues, consider reviewing options for replacing your existing IT operations tools so your organization can ensure performance while optimizing for business impact. There are solutions available now that modernize and transform the way you manage and operate on-premises and cloud environments.

> " *Begin by knowing the shortcomings of your current IT operations.* "

Issue	Description	Present in Your Environment?
Business Issues		
Multiple, fragmented and patchwork products and user interfaces	Integrated management of private, public, hybrid and multiple clouds isn't possible or is limited	Yes | No
New IT paradigms and skills	New initiatives (e.g., cloud first and DevOps) pressure IT to become more agile, but existing tools are complex and require continuous manual intervention	Yes | No
Shrinking budgets to support increasing demands	Tools are incomplete for providing governance, visibility, monitoring and troubleshooting across on-premises data centers and public clouds, challenging your IT team to deliver on service-level agreements (SLAs) and increase efficiency	Yes | No

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Issue	Description	Present in Your Environment?
Technical Issues		
Siloed infrastructure	Clouds are becoming your next silos without one solution to manage all of them	Yes | No
Automation without control	The consequences of automation are only available after an action has occurred, which puts your team in a difficult position	Yes | No
Legacy planning challenges	The consequences of automation are only available after an action has occurred, which puts your team in a difficult position	Yes | No
Unacceptable downtime, disruptive maintenance and difficulty assessing root cause	Existing tools make it hard to deliver just-in-time resources to assure application performance	Yes | No

2 Evaluate: Criteria for a Modern IT Operations Solution

The role of IT has changed. So how you evaluate IT operations management solutions has to evolve, too. Silos of products, services and responsibilities are now unacceptable. Today, self-driving operations need to be core elements of your approach, replacing manual, error-prone processes that add complexity to your IT operations.

What is self-driving operations?

Self-driving operations is a powerful strategy for automating and simplifying operations management that incorporates artificial intelligence (AI) and machine learning (ML) to help your IT team be more proactive and agile. As your data center grows in scale and complexity, your team can confidently work hands-off and hassle-free, from apps to infrastructure, whether your workloads run on-premises in a software-defined data center (SDDC) or in a multi-cloud environment.

When evaluating an IT operations management solution, look for the following four critical categories of capabilities.

> " *Base your evaluation on the right selection criteria.* "

A. Continuous performance optimization to reduce the downtime

Optimal application performance should come at minimal cost yet be driven by operational and business intent. Real-time, ML-driven predictive analytics should perform actions to automatically balance workloads and proactively avoid contention.

Capabilities	Included in Solution
Automated workload balancing, including cross-cluster workload balancing	Yes | No
Continuous and automated workload placement throughout the virtual machine (VM) lifecycle	Yes | No
Automated host-based placement, driven by business and/or operational intent	Yes | No
Hyperconverged infrastructure performance optimization	Yes | No
Predictive distributed resource scheduling	Yes | No

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B. Efficient capacity management to reduce costs

Real-time, ML-powered capacity analytics should deliver optimal utilization, cost savings and consolidation along with proactive planning and procurement.

Capabilities	Included in Solution
Capacity reclamation and right-sizing	Yes | No
Correlate capacity and cost insights	Yes | No
Capacity planning, including capacity modeling and forecasting	Yes | No
Additional features that reduce mean time to resolution: • Performance recommendations • Capacity recommendations • Compliance and security recommendations • Hardware and system fault recommendations • Policy-based automation	Yes | No

C. Intelligent remediation to speed time to value

You should be able to predict, prevent and troubleshoot faster using actionable insights by correlating metrics and logs while gaining unified observability from applications to infrastructure. You should have centralized IT operations management with native SDDC integrations and federated views in a highly scalable and extensible platform.

Capabilities	Included in Solution
Unified observability	Yes | No
360-degree troubleshooting	Yes | No
Native SDDC integrations (with SDDC storage and SDDC network management, for example)	Yes | No
Global operations view within a unified management console	Yes | No
Common packaged applications and operating systems native monitoring	Yes | No
Open and extensible platform	Yes | No
Multi-symptom alerting	Yes | No
Custom dashboards and heat maps	Yes | No
Comprehensive log analysis	Yes | No
Insight into application dependencies	Yes | No
Data center as well as hybrid and multi-cloud support: • Extensibility to other private and public clouds • Extensibility to supporting infrastructure (compute, storage and network components) • Extensibility to leverage existing operations tools	Yes | No

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# D. Integrated compliance to improve risk management

You should be able to reduce risk and enforce IT and regulatory standards. Integrated compliance and automated remediation should be part of any modern IT operations solution.

Capabilities	Included in Solution
Hybrid configuration and compliance for VMware vSphere©, VMware NSX-T™, VMware vSAN™ and VMware Cloud™ on AWS	Yes | No
Out-of-the-box or custom configuration templates	Yes | No
Automated configuration management	Yes | No
Automated drift remediation	Yes | No

3 Prepare: Develop Questions to Ask Vendors as You Compare Solutions

To ensure you're comparing solutions effectively, establish a list of questions to ask all vendors delivering an operations management solution. These sample questions can jump-start your efforts.
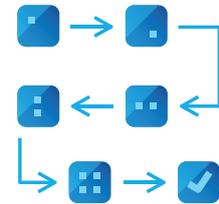
Performance

- How does the solution reduce downtime?
- Does the solution provide comprehensive data and policy-based control across the entire infrastructure, wherever we choose to run our workloads?
- What capabilities help us easily, and in an automated way, manage both on-premises data centers and public cloud deployments?
- How does the solution make it easier and faster to select cloud services, migrate workloads on premises and to clouds, and track usage?
- How does the solution help me manage and optimize cloud services?
- Can the solution support traditional and cloud-native apps with the security, agility, reliability and governance our enterprise demands?

> " *Know what questions to ask the vendor before choosing the solution.* "

Capacity and Efficiency

- How does the solution help us reduce costs?
- How does the product help ensure we aren't needlessly wasting money on infrastructure, guessing, over-provisioning or counting on legacy planning processes to meet SLAs and keep costs down?
- Can the solution support our business as it changes, such as addressing shrinking budgets while meeting faster time-to-market and demands from new lines of business?
- How does the solution integrate with our other SDDC components (e.g., virtual storage, networking, and so on)?
- How does the solution enable everyone on our team to show business value, and how does it support our team being constantly evaluated?
- Does the solution use advanced analytics with AI/ML intelligence?

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Remediation

- How does the solution speed time to value?
- Can we use the solution to optimize observable conditions against business key performance indicators (KPIs)?
- How does the solution give us more than a limited view of infrastructure silos?
- What does the solution include that goes beyond reacting and manual troubleshooting?
- Can the solution correlate events and discover root-cause analysis easily and beyond a static understanding of relationships, and how will it support IT as we move to new, dynamic SDDC and cloud infrastructures?
- Why is this solution an easier way to correct problems?
- How does this product integrate services from many clouds and the legacy environment, so our IT staff can deliver even more innovative services?

Compliance Management

- How does this solution reduce risk in our environment?
- What capabilities in this solution enable us to proactively and in real time and reliably optimize, remediate and enforce compliance?
- What capabilities in this solution support governance, visibility, monitoring and troubleshooting across on-premises data centers and public clouds for unified visibility, so we can deliver on SLAs and increase efficiency?
- What capabilities and customization does this solution offer that would allow us to confidently remain in control of automation decisions?

Because digital transformation involves more than technology, evaluating your people and processes comes next.

4 Identify: Identify Your Team's Skills and Address Any Gaps

Your organization is unique, so your evaluation of skills and skill-set gaps will be, too. The following recommendations from industry leaders will help you get started:
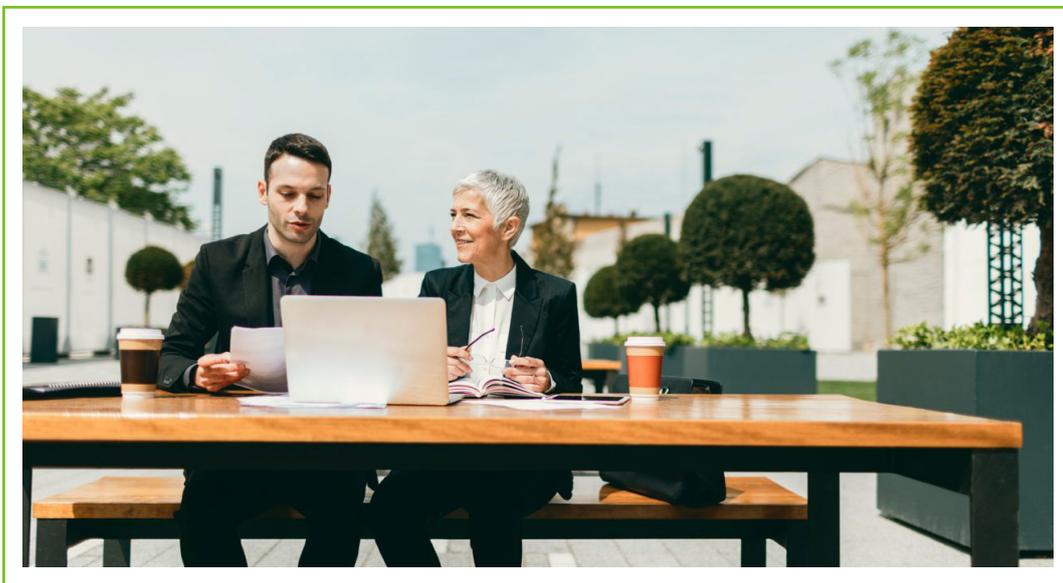
- Innovation Mindset: 4 Keys to Building a Culture of Innovation
- How We Overcame Cultural Bias and Built the "Best IT Shop in the Nation"
- Creating the Next Generation of Leaders with Active Mentoring

> " *A few recommendations by industry leaders to set you on the right path.* "

5 **Analyze**: Review Your Current Processes to Adopt New Technology

Just like your culture and staff skills, your processes are also unique. The following recommendations from industry leaders may help you evaluate processes as you adopt new technology:

- Adopting the Cloud Model: Running Data Centers Like Clouds
- Here's Why AI May Be the Fastest Paradigm Shift in Tech History
- How the Most Security-Conscious Industries Adopt Public Cloud
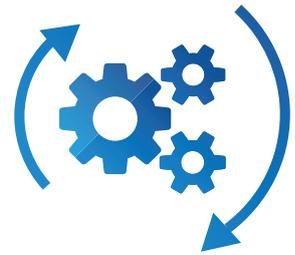
Discover Self-Driving Operations from VMware

Software is disrupting industries, but it takes effective operations management of your portfolio to sustain a competitive advantage. That's why your business needs software-defined IT with self-driving operations. Hands-off and hassle-free cloud management boosts agility and scalability while optimizing for performance, availability, compliance and cost.

Self-Driving Operations
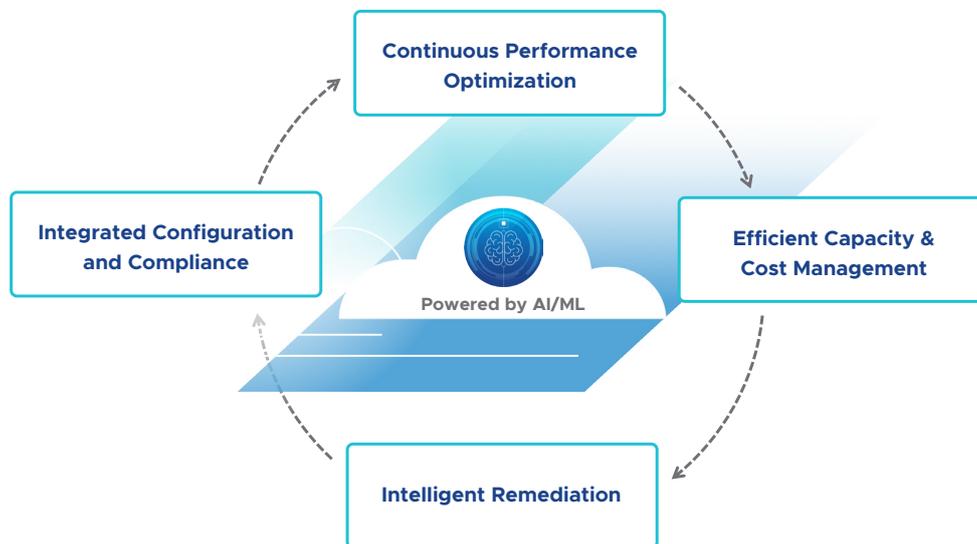
Be sure to ask about self-driving operations powered by VMware vRealize® Operations™ when you're evaluating IT operations management solutions.

Learn more at vmware.com/products/vrealize-operations