The Benefits of VMware’s vCenter Operations Management Suite:

Quantifying the Incremental Value of the vCenter Operations Management Suite for vSphere Customers

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Executive Summary

vCenter Operations Management Suite customers reported significant gains in operational benefits, key performance metrics, and benefits to their businesses as a result of deploying vCenter Operations Management Suite in their vSphere environments. Most notable was a **31% incremental savings in IT costs over customers who had vSphere installed** but not vCenter Operations Management Suite and a total **50% reduction in IT costs due to VMware software**. Similar efficiencies were gained in areas such as incident management, performance management, and configuration management.

Key performance metrics increased by between 30% and 40%, above and beyond the considerable increases gained from implementing vSphere alone. vCenter Operations Management Suite enabled significant increases in capacity utilization, consolidation ratios, and infrastructure performance. These findings were confirmed by interviews with IT Executives, who reported performance increases and faster problem resolution due to vCenter Operations Management Suite use.

Our study concluded that vCenter Operations Management Suite enables IT to be more proactive and responsive in their management of vSphere environments, resulting in not only more productivity within IT, but also in visible business benefits that are directly attributable to IT.

Study Methodology

To understand and quantify the benefits of vCenter Operations Management Suite in vSphere environments, Management Insight interviewed 200 customers via a web-based study on behalf of VMware. Of these customers, 100 had vSphere only, and the other 100 had purchased both vSphere and vCenter Operations Management Suite to automate operations and lower operational spend.

Subsequent to the web-based study, Management Insight conducted 12 follow-up phone interviews with IT Execs using vCenter Operations Management Suite to better understand how the benefits were achieved. This report highlights the results of our study.
Quantified Benefits of Deploying vSphere and vCenter Operations Management Suite

Operational Benefits

To measure the operational benefits, two groups of customers were interviewed:

- Those that deployed vSphere, but not vCenter Operations Management Suite
- Those that deployed both vSphere and vCenter Operations Management Suite

The first group was a control group to quantify the benefits of using vSphere. The second group quantified the additional benefits gained by using vCenter Operations Management Suite in a vSphere environment. Specifically, the second group was asked: “For each operational area, how much improvement has your company experienced from deploying vCenter Operations Management Suite above and beyond what you experienced from vSphere alone?”

Figure 1: Operational benefits from deploying vCenter Operations Management Suite in a vSphere environment

<table>
<thead>
<tr>
<th>Average Benefits Reported by Customers</th>
<th>Avg improvement from vSphere</th>
<th>Incremental improvement from vCenter Operations Management Suite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downtime: tier 1 apps</td>
<td>37%</td>
<td>+36%</td>
</tr>
<tr>
<td>Time on configuration mgt</td>
<td>40%</td>
<td>+38%</td>
</tr>
<tr>
<td>Time on diagnostics &amp; problem resolution</td>
<td>33%</td>
<td>+26%</td>
</tr>
<tr>
<td>Time on incident isolation/remediation</td>
<td>33%</td>
<td>+30%</td>
</tr>
<tr>
<td>Time on patch &amp; change mgt</td>
<td>32%</td>
<td>+36%</td>
</tr>
<tr>
<td>Time on compliance mgt</td>
<td>26%</td>
<td>+33%</td>
</tr>
</tbody>
</table>

Figure 1 illustrates the operational benefits of deploying vCenter Operations Management Suite in a vSphere environment. Operational benefits are defined as those that increase IT efficiency.

These efficiencies translate into cost savings. Using vSphere reduces the overall cost of managing an IT infrastructure by 28%, and using vCenter Operations Management Suite further increases savings by 31%, resulting in a net cost reduction of 50% $(50\% = 28\% + 31\%$ of the remaining 72%). IT costs are cut in half by deploying vCenter Operations Management Suite in a vSphere environment.
It is important to note that additional productivity gains are realized in corresponding areas that contribute to the overall cost of managing IT, such as the cost of incident management, configuration management, and compliance.

To better understand and validate these findings, 12 follow-up interviews were conducted with vCenter Operations Management Suite customers. The following customer quotes not only verify that the quantitative data presented above accurately reflect the customer experience, but also provide insight into how the benefits were achieved:

“The most important thing to me was [vCenter Operations Management Suite’s] ability to look across the stack and not just at the ESX servers.”

“That part [the 70% reduction in the downtime of tier one apps] does get exciting, because I saw right away where I was making mistakes. I was able to spread the love, so to speak, across all the servers.”

“I can do [diagnostics and problem resolutions] in half the time ... [vCenter Operations Management Suite] frees up my time to do other things and implement other things instead of being bogged down in the trenches and chasing ghosts all day.”

The key take-away from these follow-up interviews is that vCenter Operations Management Suite enables IT Managers to see their entire vSphere environment holistically, and enables them to immediately identify hot spots associated with performance or capacity bottlenecks, and problems with components affecting specific VMs.

IT Executives and Managers uniformly felt that vCenter Operations Management Suite improved their quality of life considerably. Rather than being forced to refer to specific vCenter logs or track down problems with specific VMs, they are now able to view the vCenter Operations Management Suite dashboard throughout the day, identify potential problems, and proactively work to resolve them before they become critical. This has reduced their stress by limiting the number of off-hours cell phone calls they typically receive.

Another way to view the operational benefits derived from deploying vCenter Operations Management Suite in a vSphere environment is illustrated in Figure 2. Prior to deploying vCenter Operations Management Suite, customers reported that one system administrator was limited to supporting 50 VMs. Subsequent to deployment of vCenter Operations Management, the same administrator has the ability to support 80 VMs.
Performance Metrics

As with the operational benefits, two groups of customers were asked about the performance metrics:

- Those that deployed vSphere, but not vCenter Operations Management Suite
- Those that deployed vSphere and vCenter Operations Management Suite

The first group was a control group to quantify the performance improvements associated with deploying vSphere. The second group quantified the additional benefits gained by using vCenter Operations Management Suite in a vSphere environment. Specifically, the second group was asked: “For each performance metric, how much improvement has your company experienced from deploying vCenter Operations Management Suite above and beyond what you experienced from vSphere alone?”

Figure 3, below, illustrates how KPIs improve when vCenter Operations Management is deployed in a vSphere environment. Deploying vCenter Operations Management Suite in a vSphere environment results in an additional 40% in capacity utilization, for a total increase of 125% (61% + 161% * 40% = 125%).
As with the operational benefits, these results are impressive. Due to the deployment of vCenter Operations Management Suite in a vSphere environment, capacity utilization and consolidation ratios more than double, infrastructure and applications availability nearly double, as do infrastructure and application performance.

Through our customer interviews, we were able to not only validate the quantitative data presented above, but also verify that the performance improvements were due to use of vCenter Operations Management Suite. Customers reported:

“I would argue a 70 percent consolidation. I was able to more efficiently make decisions about memory over-commits and disk over-commits, because I was clearly seeing data that told me, ‘This isn’t going to be an issue’.”

“When the initial project to virtualize for this organization came along, their target was to have ten virtual machines on each dual-socketed server. By the time the CapIQ tool came along, we were running at around 15. Our current density now is about 22 VMs per host....[vCenter Operations Management helped] in just balancing the loads, and seeing what a machine is doing.”

A key benefit from the additional visibility into the vSphere environment is increased IT Administrator confidence. vCenter Operations Management Suite, therefore, enables IT to more aggressively leverage its physical infrastructure.
Business Impact

The benefits of deploying vCenter Operations Management Suite in a vSphere environment extend beyond IT to positively impact their end users and businesses. In fact, those who have deployed vCenter Operations Management Suite experienced a 41% improvement in end user satisfaction with IT.

Once again, customer interviews validate our research and shed light into why satisfaction with IT improves due to deployment of vCenter Operations Management Suite in a vSphere environment:

“... when you have your customers come back to you and say, ‘What did you do? Everything's much faster’, It's one of those moments that you take back to your management and you say, ‘This is what I'm getting across the board’ ... I may sound a little excited about that, but that was the Aha! moment for people.”

“Your customers definitely love it when they call when there's a problem and you can quickly resolve it, or you can at least quickly tell them what the problem is, and what you can do to fix it.”

“I'm able to go to [the client] and say, ‘There's been an outage on this machine, and the impact of the other VMs that are there are these. However, you have not taken an unscheduled outage, because these machines are now surviving on other nodes within that same cluster’.”

We see that vCenter Operations Management Suite enables IT to be more proactive and responsive in their management of their vSphere environment, resulting in not only more productivity within IT, but in visible business benefits for their companies that are directly attributable to IT.
About vCenter Operations Management Suite

VMware vCenter Operations Management Suite uses patented analytics and powerful visualizations to automate performance, capacity and configuration management. It collects and analyzes performance data, correlates abnormalities and identifies the root cause of building performance problems. vCenter Operations Management Suite abstracts performance to three measures that allow instant identification of issues from the datacenter level down to individual components. vCenter Operations Management Suite provides capacity management to optimize resource usage and policy-based provisioning and configuration management to enable compliance and eliminate sprawl and configuration drift. Administrators and operations teams can remediate infrastructure and applications from at-a-glance views of operational and regulatory compliance across physical and virtual environments.

To download a trial version of vCenter Operations Management Suite, go to http://www.vmware.com/go/try-vcenter-ops.

About Management Insight

Established in 1993, Management Insight is a full-service market research consulting firm dedicated to helping technologies companies find answers and insights that lead to superior business performance.

Using advanced and reliable models for research, Management Insight designs and executes domestic and international qualitative (interviews, focus groups) as well as quantitative (in-person, phone, web) studies to meet client objectives. Management Insight helps clients validate products concepts, uncover customer preferences and motivations, develop requirements, identify and profile segments, galvanize strategies, assess competitors, forecast market trends, measure marketing effectiveness, improve channel programs, track customer loyalty, drive organizational effectiveness, and improve employee satisfaction.

Unlike many research firms, the Management Insight team is composed of seasoned technology executives collaborating with research methodologists. This combination of professionals allows us to offer deeper analysis, perspective and insight so that research is both understandable and actionable.

Management Insight Technologies has completed significant studies for industry leaders such as VMware, EMC, HP, Cisco, IBM, IDC, Microsoft, Oracle, Red Hat, and CA Technologies, as well as many technology start-ups.