Lowest TCO for Highest Resource Utilization and Administrator Productivity

TCO studies prove that virtualizing with VMware solutions costs less than with Microsoft.[3] VMware optimizes hardware utilization, provides superior management and policy-based automation, and enables a highly available and resilient infrastructure that minimizes downtime costs. By freeing IT resources to innovate for the business and drive growth—while also providing the most capable platform for cloud initiatives—VMware can deliver lower cost and greater business value than Microsoft.

Microsoft might claim a lower-cost solution, but its comparisons consider only virtualization and OS software licenses—a small portion of overall solution costs. When the cost of System Center management tools, 24x7 technical support, and data center infrastructure are accounted for, the Microsoft acquisition costs are similar even for small-business deployments. Compared to Microsoft, VMware substantially lowers OpEx with several advanced features and more-streamlined management that provide far higher levels of resource utilization and administrator productivity. CIOs can fuel business growth with the resources they currently have without requiring additional hours or an army of consultants. To accurately compare TCO, enterprises must evaluate both CapEx and OpEx (see Figure 5).
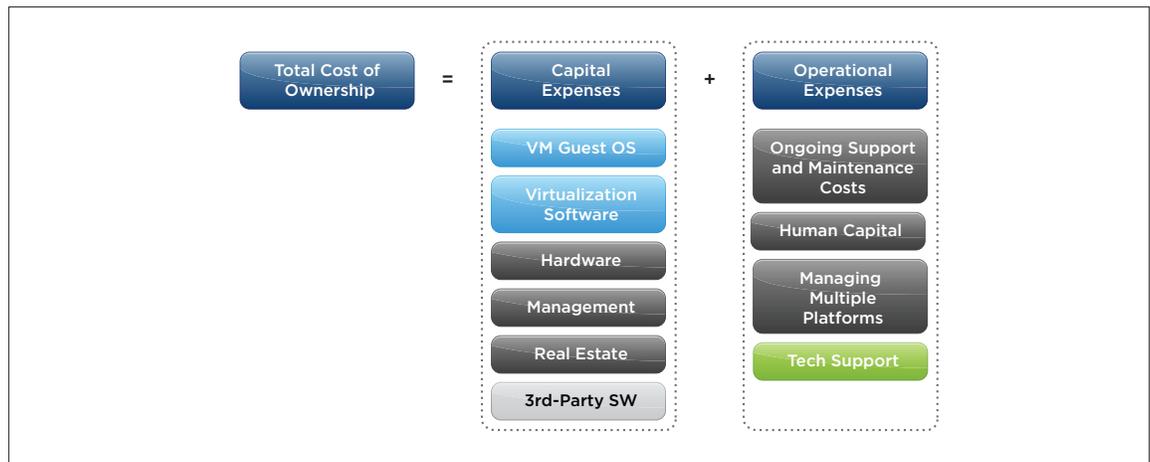

Figure 5: Accurate TCO Analyses Include Both Capital and Operational Expenses

For private-cloud decisions, CapEx includes all of the acquisition costs associated with implementing a solution. OpEx includes the time IT administrators spend managing that solution. VMware reduces CapEx with its superior virtual-machine density—how many virtual machines can run per host, which reduces the numbers of servers and software licenses that must be acquired. VMware provides a density advantage over the competition through more advanced resource management. vSphere uses memory better by employing sophisticated multilayered memory management that includes compression, ballooning, transparent page sharing, and hypervisor-level swapping. In contrast, Microsoft Hyper-V provides only dynamic memory and only virtual machine boot-time host swapping. vSphere also excels at cluster-level virtual machine load balancing. Customers using both vSphere and Hyper-V regularly report that they are able to operate with higher virtual machine densities on vSphere.

Sources of OpEx savings are derived from

- Platform installation and configuration
- Deploying new tenant users
- Creating self-service cloud portals
- Configuring and running chargeback reports
- Management and monitoring

- Responding to network security attacks
- Patching and updating
- Adding storage and balancing capacity
- Isolating "noisy neighbor" virtual machines
- Performing regular disaster-recovery tests

3. Studies available from VMware on request.