Business Value of Cisco Compute Infrastructure for Virtualized Applications, Desktops, and Workstations

EXECUTIVE SUMMARY

Virtualized applications and desktops are a key component in work-from-home, intelligent workspace, and future-of-work transformations. Prior to the worldwide pandemic, economic disruption, and social unrest in early 2020, organizations were already moving forward with these transformations; these disruptions served to accelerate the rate and depth of the event.

This acceleration did not, however, change the underlying technical realities of virtualization. Virtualized applications and desktops are still highly sensitive to performance degradation. The infrastructure resources used to provide compute and storage to the software need to be located as close to the data and applications being provided as practically possible. The operations and management of the brokers, hardware, and network components require time, focus, and attention.

IDC interviewed organizations running virtualized applications, desktops, and workstations for professional graphics on Cisco infrastructure, including Cisco UCS and Cisco HyperFlex solutions (collectively “Cisco infrastructure for VDI”). Interviewed Cisco customers rely on their ability to deliver timely and high-performing VDI services to their employees and customers. They reported achieving strong value by upgrading with Cisco infrastructure for their VDI environments, which IDC projects will be worth $1.07 million per organization ($61,400 per 100 VDI users) by:

- Lowering operational costs through efficiencies in managing infrastructure and optimizing infrastructure costs to run like VDI workloads
- Minimizing productivity and revenue losses by bringing down the frequency and duration of unplanned outages affecting virtualized workloads and ensuring business resiliency through centralized management of virtualized devices

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Business Value Highlights

- 382% five-year ROI
- 8 months to payback
- 47% lower five-year cost of operations
- 63% more efficient IT infrastructure teams
- 99% less unplanned downtime
- 52% faster to deploy new virtualized applications and desktops

Sponsored by: Cisco

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• **Meeting business needs for virtualized functionality** by enabling faster delivery of new virtualized applications, desktops, and workstations

• **Increasing employee productivity levels** by delivering higher-performing virtualized applications, desktops, and workstations for professional graphics

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**CONCLUSION**

The virtualization of applications and desktops is a critical component of the future of work, both in the near-term sense of business continuity in the face of disaster and in the long-term sense of full digital transformation. It plays a role in the creation of the intelligent digital workspace — the next evolution of the familiar “desktop” environment. As such, virtualization capability needs to be high performing and flexible and able to rapidly adapt and scale across all three operating environments (public cloud, private cloud, and dedicated hardware).

IDC’s research underscores the importance of IT infrastructure to providing a high-performing and flexible VDI environment. Interviewed Cisco customers reported achieving strong value by using Cisco HyperFlex and Cisco UCS to run their virtualized applications, desktops, and graphical workstations. In particular, study participants have enabled their employees as they leverage higher-performing, reliable, and more flexible VDI capabilities to do their jobs. The result has been both quantifiable benefits in the form of higher employee productivity levels and benefits that are more challenging to quantify, including having the ability to deploy and extend virtualized workloads on short notice in support of business operations. Combined with IT infrastructure cost and IT staff efficiencies, interviewed organizations reported that the use of Cisco infrastructure has generated value that IDC quantifies as worth an average of $1.07 million per organization ($61,400 per 100 VDI users), which would result in a five-year ROI of 382%.

"The soft ROI is where we get the big benefit with Cisco UCS. Now, VDI can be used any time, any place, anywhere. We’re not locked down to desk/local environments anymore … We’ve expanded from 500 to 2,000 desktops."

"By upgrading to Cisco HyperFlex for our VDI workloads, we’ve increased performance by 30–50%. With increased compute resources with Cisco HyperFlex, we changed our model so that every virtual desktop user gets their own dedicated VM machine. That helps with performance …"