

The Business Value of Cisco Nexus Dashboard



Vijay Bhagavath
Research Vice President,
Cloud and Datacenter Networks, IDC



Matthew Marden
Research Vice President,
Business Value Strategy Practice, IDC



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Executive Summary

Cisco Nexus Dashboard is a best-in-class network infrastructure management solution offering a single pane of glass for unifying multiple network configurations and views of switches, datacenters, and cloud platforms. Hosted as an on-premises or cloud appliance, Nexus Dashboard is included with every Cisco Nexus 9000 switch-tier license and offers full life-cycle network management capabilities. These range from “network provisioning” — initial setup, configuration, and automation — to “network operations” — insights, visibility, analytics, troubleshooting, compliance, etc.

Through a series of in-depth interviews, IDC conducted research that explored the value and benefits for organizations using Cisco Nexus Dashboard to support their network management efforts. The project included 10 interviews with companies that had experience with and knowledge about the benefits and costs of using the platform.

Based on extensive quantitative and qualitative data derived from these interviews, IDC calculates that study participants will achieve a 350% return on investment over three years by:

- Boosting the overall productivity of network infrastructure management teams, thereby freeing up these teams to better support innovative and business-oriented projects
- Improving the overall productivity of network security, help desk, and troubleshooting teams
- Mitigating the impact of planned and unplanned downtime, contributing to boosting business productivity while alleviating the burden on help desk teams
- Using these improvements to achieve mean time to innocence and resolution by automating the mundane tasks to focus on business priorities that are of higher value and gain new revenues, thereby producing better business results

Business Value Highlights

Click the highlights below to navigate to content within this document.

- ↑ **350%**
three-year ROI
- ➔ **4 months**
to payback
- ↑ **26%**
more efficient network infrastructure teams
- ↓ **33%**
less time spent “keeping the lights on”
- ↑ **27%**
more efficient troubleshooting teams
- ↑ **52%**
more efficient help desk operations
- ↓ **50%**
reduction in unplanned downtime
- ↑ **\$12.2 million**
in total new revenue gained/protected annually

Situation Overview

Network infrastructure management is a critical part of an enterprise's digital transformation journey that brings with it the need to rethink how datacenter networks are provisioned, managed, and operated seamlessly across on-premises and cloud provider platforms.

Datacenter network infrastructure tooling — from an IT usage perspective — is largely fragmented. IT practitioners routinely use a combination of vendor-provided, third-party, and open source tools for handling critical IT tasks such as automated network provisioning, visibility, analytics, troubleshooting and remediation, and governance and compliance.

The tooling problem is compounded when IT admins manage their organizations' network infrastructure spanning a plurality of on-premises and cloud provider environments and multiple control points for life-cycle management connectivity services on a 24 x 7 x 365 basis.

Increasingly, organizations — across industry verticals, company size, and geographies — are voicing their view on the need for digital infrastructures to be managed more in “concert” versus as a collection. The “whole” operates more efficiently and effectively than the sum of the parts. Network and application resiliency, security posture, staff productivity, operational simplicity, and other IT and business outcomes are significantly enhanced through NetOps unification.

A case in point is IDC's *FERS Wave 10 — November 2022* survey (n = 824) highlighting that 65% of IT and business decision makers surveyed worldwide (61% in North America; 78% in Asia/Pacific; 52% in Europe) want to “unify” the way they manage and secure dedicated on-prem and public cloud infrastructures for improving digital business resiliency.

Further, our primary research with IT practitioners — network architects, engineers, and NetOps staff — indicates that datacenter networking IT staff are looking for tooling solutions for automating repetitive and error-prone tasks such as intent assurance, change management, network visibility, monitoring and log analytics, and network equipment hardware and software upgrades.

Network infrastructure management and automation tools are resilient IT budget line items. IDC's *FERS Wave 12 — January 2023* survey (n = 1,032) notes that 72% of IT and business decision makers surveyed express a resilient willingness to pay (26% in-line; 46% saying 5%–10% year-over-year increase) for network infrastructure management and automation solutions in 2023 versus 2022.

Increasingly, organizations — across industry verticals, company size, and geographies — are voicing their view on the need for digital infrastructures to be managed more in “concert” versus as a collection.

Cisco Nexus Dashboard Overview

Nexus Dashboard is a unified IT platform and console offering comprehensive “day 0-to-2+” network automation and operations capabilities. This is for simplifying the life-cycle management of Cisco-powered on-premises, cloud, and hybrid datacenter networking environments.

Nexus Dashboard runs multiple “fabric-agnostic” services implemented via Cisco-powered services, which include Insights, Orchestrator, Data Broker, and third-party apps. These Nexus Dashboard services, functioning in concert, offer a unified operational view to IT administrators.

IT teams, across operational domains, can utilize Nexus Dashboard Insights for executing mission-critical IT tasks. These range from “day 0/1 provisioning” — initial setup, configuration, and network automation — to “day 2+ operations” — visualizing and actioning network visibility and analytics metrics, troubleshooting and root cause analysis, and governance and compliance, etc.

Cisco Nexus Dashboard is included with every Cisco Nexus 9000 switch-tier licensing purchase and can be deployed across an enterprise’s hybrid cloud footprint — in physical, virtual, or cloud appliance form factors. Specific services and feature access are based on the purchased licensing tier. Further, Nexus Dashboard integrates with best-in-class third-party services such as ServiceNow and Splunk and provides a focal point for cross-domain IT tooling integration.

Nexus Dashboard is a unified IT platform and console offering comprehensive “day 0-to-2+” network automation and operations capabilities.

We summarize below key capabilities, offered in a unified manner, on the Nexus Dashboard platform:

- **Nexus Dashboard Insights:**

The Dashboard Insights service enables IT administrators to minimize downtime by transforming platform telemetry — network anomalies and advisories — into insights. This is to flag potential issues and offer actionable remediation. Insights also leverages fine-grained network analytics for gaining an understanding of sustainability, compliance, topology changes, and traffic behavior — flow records, drop, congestion, latency, Ethernet-based AI/ML networking, RoCEv2, etc.

From a sustainability perspective, Nexus Dashboard Insights offers granular IT reporting on power consumption, energy sources, and emission rates for customer-specific network environments. Integrations with power-management vendors such as Panduit and Vertiv enable organizations to gain both real-time and historical power consumption insights into individual IT platforms as well as the overall enterprise datacenter infrastructure footprint, spanning multiple locations.

Additionally, Insights enhances network visibility by integrating tooling metrics from VMware, Splunk, ServiceNow, Panduit, Vertiv, and others. Insights integrates advanced alerting, baselining, correlation, and forecasting capabilities for offering dynamic runtime understanding of the network.

- **Nexus Dashboard Orchestrator:**

The Orchestrator service offers IT teams operational capabilities to centralize network and policy configurations and interconnect network fabrics and cloud frameworks over any routed network. The Orchestrator capability enables ease of datacenter and cloud migration and network extension across fabric architectures.

Dashboard Orchestrator also provides change management workflows, centralized fabric management and upgrades, seamless multicloud and hybrid-cloud connectivity at scale, network segmentation, and consistent security and other IT-specific policies across the datacenter, SD-WAN, campus, and branch networks.

- **Nexus Dashboard Fabric Controller (NDFC):**

The fabric controller service integrates management for multiple Cisco NX-OS-based switch platforms, providing automation and monitoring capabilities for LAN, EVPN VXLAN, IPFM, and SAN fabrics.

NDFC enables auto-discovery of newly installed and existing network switches (Cisco and third-party). Additionally, NDFC leverages Zero Touch Provisioning (ZTP), fabric monitoring, backup, faster provisioning and upgrades, and other Cisco tooling capabilities.

- **Third-Party Applications:**

Nexus Dashboard implements an open API model with an evolving suite of services for third-party developers to build NetDevSecOps applications. REST APIs enable third-party tooling integration with Nexus Dashboard services such as Insights and Orchestrator. Cisco currently supports IT ecosystem platform integration with ServiceNow ITSM/ITOM, Splunk SIEM, HashiCorp Terraform, and Red Hat Ansible.

The Business Value of Cisco Nexus Dashboard

Study Firmographics

IDC conducted research that explored the value and benefits for organizations using Cisco Nexus Dashboard to support their network management efforts for their organization. The project included 10 interviews with companies that had experience with and knowledge about the benefits and costs of using the platform. During the interviews, companies were asked a variety of quantitative and qualitative questions about the solution's impact on their IT and network operations, core businesses, and costs.

Table 1 presents the aggregated firmographics of interviewed organizations. The organizations that IDC interviewed had a base of 60,128 employees with annual revenues of \$14.2 billion and 3.58 million external customers. These companies had IT staff counts of 3,524 managing 248 business applications. In terms of geographic distribution, three companies were based in the United States and three in the United Kingdom, with the remainder in Germany and Norway. There was a mix of vertical markets represented, namely the financial services, information technology, government, entertainment, healthcare, and manufacturing sectors. (Note: All numbers cited represent averages.)

TABLE 1
Firmographics of Interviewed Organizations

	Average	Median	Range
Number of employees	60,128	13,000	24–400,000
Number of IT staff	3,524	900	5–11,000
Number of external customers	3.58M	125,000	10–25.00M
Number of business applications	248	200	5–2,000
Revenue per year	\$14.20B	\$1.00B	\$3.04M–\$78.80B
Countries	United Kingdom (3), United States (3), Germany (2), Norway		
Industries	Financial Services (3), Information Technology (2), Government, Entertainment, Healthcare, Manufacturing		

n = 9; Source: IDC Business Value In-Depth Interviews, September 2023

Choice and Use of Cisco Nexus Dashboard

The organizations interviewed by IDC described their rationale for selecting Cisco Nexus Dashboard to improve their datacenter network operations and modernization efforts. Study participants noted that the platform gave their organizations the ability to keep on top of sprawling and complex network growth while gaining more detailed insights into the infrastructure and applications. Study participants cited positive experiences by gaining better multi-site policy management across multiple datacenters and orchestrating that policy at the global level across multiple datacenters. They also were looking for a solution that would help them better manage “network sprawl.”

Study participants elaborated on these and other selection criteria:

Monitoring the network has become very challenging (Information Technology):

“We have our network, and two datacenters with Cisco ACI. We’ve had that for five or six years, and we needed a tool to monitor it. We considered Nexus Dashboard, and this year we deployed it.”

Have a complex network to monitor (Information Technology):

“Mostly, we have quite a broad Cisco datacenter (implementation), a number of different products, and the more the company grows, the harder it is to keep track of... We chose Nexus Dashboard because we needed more detailed insights into the infrastructure and applications that run on top of our infrastructure, to ease our operational efficiencies, and help us verify that the network is working as expected, and that we don’t have any ghosts in the closet, so to speak.”

Seeking a solution to monitor multiple sites (Financial Services):

“The primary reason we chose Nexus Dashboard was that it is easy to use for our multi-site policy management across multiple datacenters ... We use Nexus Dashboard Orchestrator, which allows us to orchestrate policy at the global level across multiple datacenters.”

Opted to choose Cisco for Datacenter networks and compute (Government):

“Last year, we invested in replacing our older datacenters. Cisco came out on top during our procurement search; they invested a lot of time in understanding our needs. This ended up with two new datacenters using Cisco ACI, UCS servers, hyperflex storage, and to facilitate that, Cisco Multi-site Orchestrator (running on top of Nexus Dashboard).”

Looking for an observability and reliability tool (Information Technology):

“We’ve always used Cisco DCNM¹. Nexus Dashboard contains that, along with other services that coalesced into one unified system. Our biggest thing is observability and reliability. This product was built for that.”

¹ DCNM is now Cisco Nexus Dashboard Fabric Controller (NDFC)

Table 2 describes the organizational usage associated with interviewed companies' deployment of Cisco Nexus Dashboard. It's worth noting that there was a substantial usage footprint across all companies, as evidenced by 76% of all revenue supported or associated with the platform. In addition, and on average, companies reported eight datacenters and 89,281 network end-user devices. On average, 82% of networks were on a software-defined networking (SDN) infrastructure, a modern two-tier datacenter where the entire network can be controlled or modified from a logical centralized point. SDN offers multitenancy, virtualized overlay networks, and dynamic traffic load balancing capabilities. The remaining 18% of networks were legacy datacenters, implemented on a traditional three-tier core/aggregation/access hardware-centric network architecture. Additional metrics are also presented in **Table 2**.

TABLE 2
Organizational Usage of Cisco Nexus Dashboard

	Average	Median
Number of datacenters	8	4
Number of sites/branches	12	7
Number of network end-user devices	89,281	300
Split of network infrastructure		
Percentage of network on legacy datacenters	18%	8%
Percentage of network on software-defined infrastructure	82%	93%
Percentage of revenue supported by applications supported by Cisco Nexus Dashboard	76%	100%

n = 9; Source: IDC Business Value In-Depth Interviews, September 2023

Business Value and Quantified Benefits

IDC's Business Value model quantifies the benefits for organizations using Cisco Nexus Dashboard to better support the management of their network operations. Quantified IDC data confirmed increased overall productivity among network management staff, allowing them to focus on datacenter modernization and innovative business projects. In addition, the platform improved the overall productivity of

network management, security, help desk, and troubleshooting teams. It also minimized the effects of unplanned downtime, thereby contributing to greater business productivity and easing the burden on network management teams. Interviewed companies leveraged these improvements to increase end-user productivity, generate new revenues, and achieve better business results.

In their comments to IDC, study participants described these and other benefits in detail:

Helps automate tracking of multiple devices (Information Technology):

“The biggest benefit is features like Endpoint Locator to track assets on the network. Having such a large-scope network, knowing when assets are moved or last seen is a major benefit; you can’t rely on people updating it or automation keeping track ... Everything is tracked within the dashboard.”

Helps keep opex down (Manufacturing):

“We keep the opex level while we scale out our services. It helps to allow growth without hiring more people by making more efficient use of our operational resources already employed. Productivity gain through better automation, self-service, and integration into workflow systems, so our application lead time has come down.”

Faster to respond to issues (Information Technology):

“Lower MTTD, lower MTTR, faster troubleshooting times. In scenarios where we’d have to switch between apps, we save about 50% of time. To correlate events within the system, we’ve reduced the workload to about 40%–50%.”

Helps with troubleshooting, network reliability, and operational efficiencies (Manufacturing):

“The first advantage of Cisco Nexus Dashboard is troubleshooting for ACI issues. The second involves network availability, reliability, and resiliency through recommended best practices and visibility. This enables improved SLA levels and services. The third benefit is operational efficiency due to increased network availability and reliability, which leads to fewer issues and faster troubleshooting.”

Based on interviews with the 10 intensive users of Cisco Nexus Dashboard, IDC quantified the value study participants will receive over three years at a 350% three-year ROI and a payback period of four months. More granular metrics and calculations regarding specific quantified benefits are presented in the following sections.

Operational Benefits of Cisco Nexus Dashboard

Growing data volumes and distributed applications and workloads have created greater expectations for seamless digital interactions for mission-critical systems and processes in the enterprise. IDC data shows that 81% of organizations are still prioritizing connectivity

programs. Companies will continue leveraging investments to automate key processes, transform workplaces, improve customer experiences, and increase corporate resiliency. As networks and business requirements evolve, enterprise network and IT departments need to work to align their systems and processes to ensure business continuity, empower greater employee productivity, and help organizations adapt quickly to changing business requirements. Another challenge is that network management is becoming more complex, diverse, and distributed and is characterized by multiple configuration points and monitoring tools.

Cisco Nexus Dashboard is designed to help companies meet these challenges. The solution adds value by acting as a unified automation and operations platform and aiming to provide best-in-class capabilities that can support network transformation and empower modern network operations teams. Cisco Nexus Dashboard Insights is a service within that platform that provides visibility and real-time insights into the operating state of the infrastructure, including network health across Cisco ACI and Cisco NX-OS (with NDFC) fabrics.

Interviewed organizations confirmed that Cisco Nexus Dashboard added significant value to their network operations. Study participants appreciated the improved level of confidence in network performance they gained by knowing with precision that the network is running as expected and identifying faults or security vulnerabilities. They pointed to the fact that network teams gained better ability to address issues before they affected customers and end users via the functionality provided by its Network Assurance Engine (which is now consolidated into Cisco Nexus Dashboard Insights). They also noted that when problems occurred, their MTTR metrics improved.

Study participants commented on these and related issues:

Improve confidence in their network infrastructure (Information Technology):

“Ensuring confidence in the infrastructure is key with Cisco Nexus Dashboard. This involves understanding that the network operates as expected, free from faults and security vulnerabilities. The assurance that the network is reliable and won’t misbehave is a significant IT advantage and acts as a safety net, facilitating quicker issue resolution, operational efficiency, and enhanced reliability in performance.”

Can address issues before they affect customers (Information Technology):

“Network Assurance Engine with Cisco Nexus Dashboard enables proactive infrastructure management, alerting us to network incidents before customers encounter them. Instant alerts, accompanied by tailored blueprints, reduce our MTTR. Dashboard Orchestrator facilitates datacenter scaling to expand services to new locations.”

SecOps team efficiencies (Financial Services):

“Our SecOps team is saving time because they have the visibility of the infrastructure from end to end rather than having to go and keep looking at things and going up manual diagrams. They have real-time information and feedback about what the infrastructure looks like.”

Ease of use and better performance (Healthcare):

“It’s simpler to use Nexus Dashboard; the past solutions were tedious and required a lot of work to manage the network and infrastructure, whereas now we have one dashboard. Since Dashboard orchestrates the underlying ACI networking, provisioning new segments, etc., can be done more easily — planning takes the most time, but achieving it is just a few clicks. And the performance of the network is unparalleled.”

Frees up staff to work on business-oriented tasks (Financial Services):

“These folks are developing new features and capabilities as part of our offering to our customers and our business units rather than doing manual work. They are doing things like self-service capabilities or automation for provisioning.”

To develop an accurate picture of Cisco Nexus Dashboard benefits, IDC first looked at improvements related to staff productivity, beginning with network management teams. Cisco Nexus Dashboard offers an array of services that make it easier for these teams to monitor the full scope of network operations as well as the connected devices that those networks support. These tools helped teams avoid managing and monitoring individual devices, fabrics, and clouds independently by integrating a consistent operational model under a single pane of glass.

Table 3 quantifies these benefits. After adoption, interviewed companies saw a 26% improvement in team productivity. In real-world terms, this meant that these teams of an average size of 19.6 FTEs were able to free up about five FTEs to work on other tasks. IDC calculated that this translated into an annual business value of \$501,100 for each organization.

TABLE 3
Network Management Staff Impact

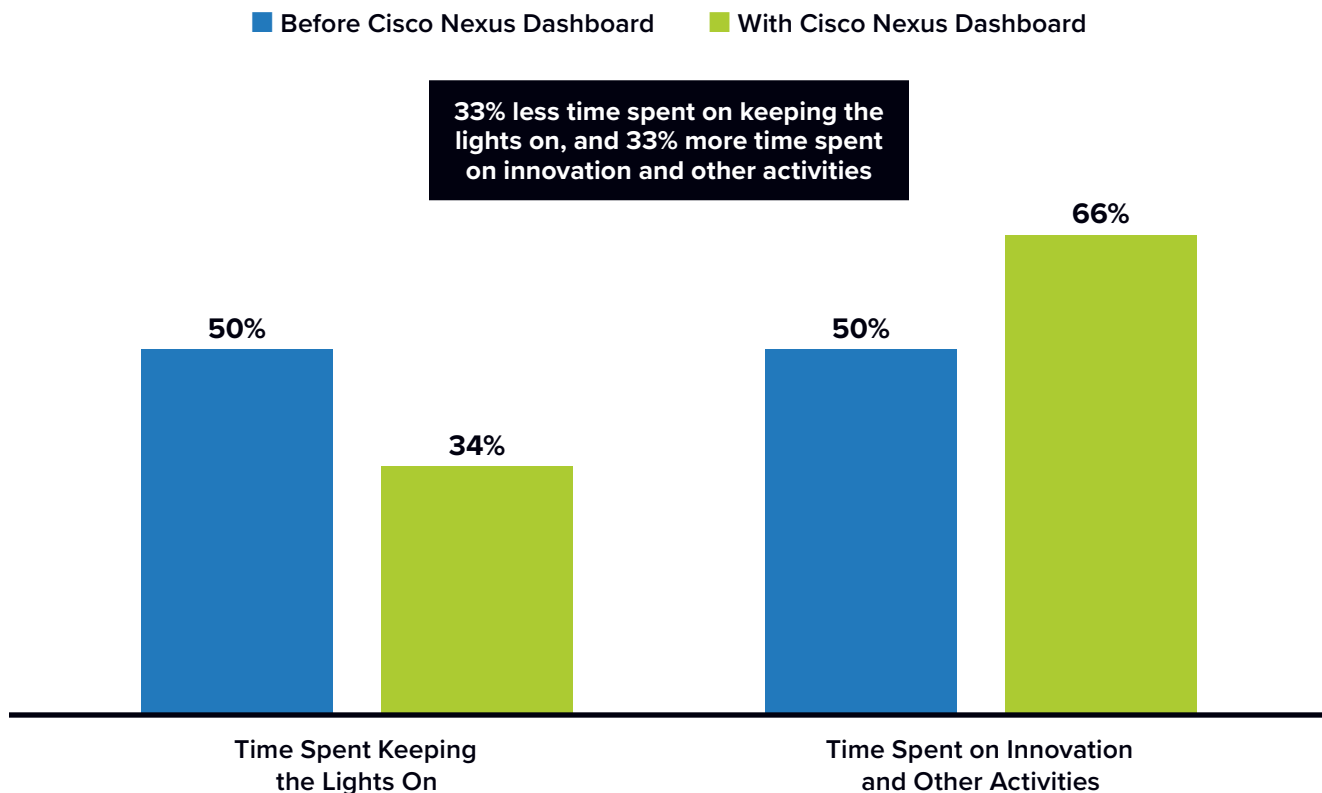
	Before Cisco Nexus Dashboard	With Cisco Nexus Dashboard	Difference	Benefit
Management of network infrastructure, FTE per organization per year	19.6	14.6	5.0	26%
Equivalent value of staff time per year	\$1.96M	\$1.46M	\$501,100	26%

n = 9; Source: IDC Business Value In-Depth Interviews, September 2023

Drilling down further, IDC quantified impacts on network infrastructure team workloads. These improvements led to teams having a greater focus on innovation and other strategic business activities. As one study participant noted: *“Because the information for network management is in one place, and because advisories are consolidated in one view, we’ve realized time savings compared with when we had to go to multiple sources and juggle the different tools we’re using. While we haven’t changed the number of employees administering the network, we’ve been able to shift them from managing faults and issues to managing higher-value activities. This means giving the customers more value.”*

Figure 1 shows these impacts. After adoption, companies needed 33% less time for “keeping the lights on,” i.e., working on routine network infrastructure maintenance tasks; as a result, they gained 33% more time for pivoting to other tasks relating to innovation and better direct support of business-related projects.

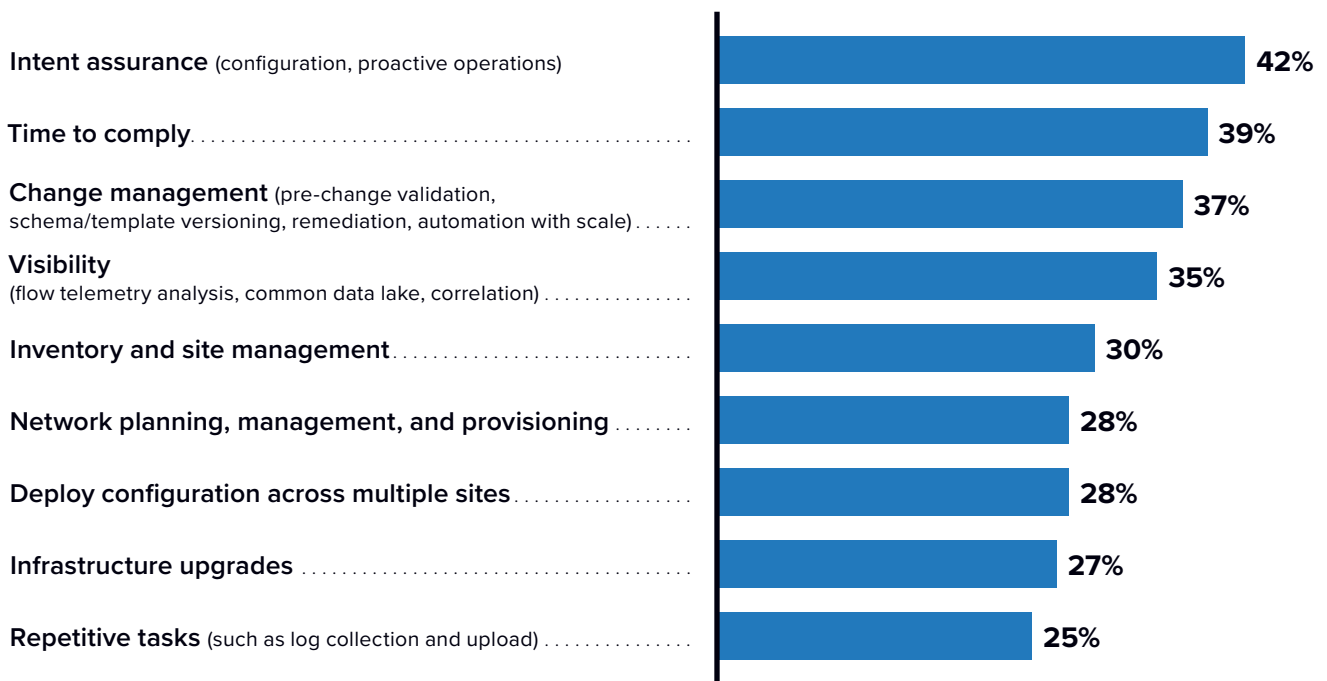
FIGURE 1
Impact on Network Infrastructure Team Activities
 (%)



n = 9; Source: IDC Business Value In-Depth Interviews, September 2023
 For an accessible version of the data in this figure, see [Figure 1 Supplemental Data](#) in Appendix 2.

IDC then evaluated network management impacts further by identifying and measuring several key performance indicators (KPIs). Cisco Nexus Dashboard helped automate various tasks routinely performed by network infrastructure teams. **Figure 2** shows IDC’s analysis. The greatest improvements were seen in intent assurance (42% improvement); time to comply (39% faster); and change management (37% improvement). Additional metrics are presented.

FIGURE 2
Infrastructure Management-Related Tasks Impact
 (% quicker)



n = 9; Source: IDC Business Value In-Depth Interviews, September 2023

Moving on to benefits for other teams, interviewees told IDC that Cisco Nexus Dashboard gave their troubleshooting teams better ability to figure out and solve problems efficiently and quickly. **Table 4** (next page) quantifies these benefits. After adoption, interviewed companies saw a 27% improvement in team productivity. This meant that an average of 22.3 FTEs were able to free up about six FTEs to work on other tasks. IDC calculated that this translated into an annual business value of \$597,000 for each organization.

TABLE 4

Troubleshooting Staff Impact

	Before Cisco Nexus Dashboard	With Cisco Nexus Dashboard	Difference	Benefit
Troubleshooting team, equivalent FTEs	22.3	16.4	6.0	27%
Salary cost per year per organization	\$2.23M	\$1.64M	\$597,000	27%

n = 9; Source: IDC Business Value In-Depth Interviews, September 2023

Study participants further told IDC that their troubleshooting teams were able to pinpoint and resolve issues more quickly after adopting the Cisco platform. In particular, they used Cisco Nexus Dashboard Insights to increase their visibility into a wide range of network operations, identify potential issues, and garner recommendations to optimally remediate them.

After adoption, interviewed companies saw a 33% decrease in the number of issues they had to field and correct and a 38% improvement in the efficiency of identifying them. Summing up this benefit, the total average staff time spent resolving troubleshooting issues decreased by 40% (Table 5).

TABLE 5

Troubleshooting Impact

	Before Cisco Nexus Dashboard	With Cisco Nexus Dashboard	Difference	Benefit
Number of issues to troubleshoot per week	54.7	36.8	18.0	33%
Average time to identify issue that requires troubleshooting (hours)	1.6	1.0	0.6	38%

Continued on the next page ►

Table 5 continued from the previous page

	Before Cisco Nexus Dashboard	With Cisco Nexus Dashboard	Difference	Benefit
Average time to undertake/perform root cause analysis	4.1	2.5	1.6	40%
Average time in total to troubleshoot per issue	5.2	3.5	1.7	32%
Average staff time in total to resolve per issue requiring troubleshooting	5.4	3.3	2.1	40%

n = 9; Source: IDC Business Value In-Depth Interviews, September 2023

Network security teams also experienced positive impacts. Study participants reported that these teams were able to reduce the time required to respond to potential issues and network-related security threats. After adoption, interviewed companies saw a 33% improvement in team efficiency, freeing up 6.4 FTEs (Table 6). IDC calculated that this translated into an annual business value of \$637,800 for each organization.

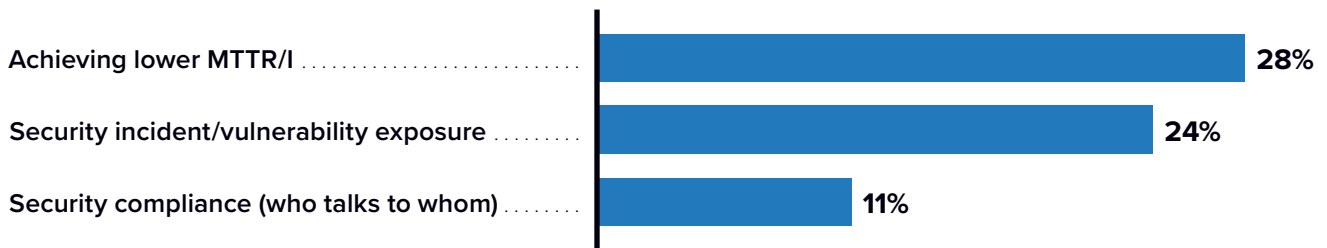
TABLE 6
SecOps Staff Impact

	Before Cisco Nexus Dashboard	With Cisco Nexus Dashboard	Difference	Benefit
SecOps team, equivalent FTEs	19.4	13.0	6.4	33%
Salary cost per year per organization	\$1.94M	\$1.30M	\$637,800	33%

n = 9; Source: IDC Business Value In-Depth Interviews, September 2023

Continuing with these impacts, IDC evaluated relevant KPIs that confirmed improvements in network security operations. **Figure 3** shows IDC’s analysis. The greatest improvements were seen in achieving lower MTTR/I (28% lower); security incident/vulnerability exposure (24% improvement); and security compliance (11% improvement).

FIGURE 3
Security-Related Tasks Impact
 (% quicker)



n = 9; Source: IDC Business Value In-Depth Interviews, September 2023

IDC then examined help desk operations. Because the network infrastructure achieved better overall performance, help desk teams had 29% fewer network-related tickets to handle. In addition, when incidents did occur, they were able to resolve them 28% faster. IDC calculated that this translated into an annual business value of \$282,100 for each organization (**Table 7**).

TABLE 7
Help Desk Impact

	Before Cisco Nexus Dashboard	With Cisco Nexus Dashboard	Difference	Benefit
Number of root cause analyses undertaken/performed	75.5	53.7	21.9	29%
Average time to resolve (hours)	3.1	2.3	0.9	28%

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Table 7 continued from the previous page

	Before Cisco Nexus Dashboard	With Cisco Nexus Dashboard	Difference	Benefit
Total help desk FTEs	5.4	2.6	2.8	52%
Salary cost per year per organization	\$543,500	\$261,400	\$282,100	52%

n = 9; Source: IDC Business Value In-Depth Interviews, September 2023

Business Improvements with Cisco Nexus Dashboard

Interviewed companies shared with IDC that following the implementation of Cisco Nexus Dashboard, they experienced significant benefits across their business operations, including improved financial outcomes. These benefits were directly tied to better productivity for network infrastructure and other network-related teams, as previously described. In addition, Cisco Nexus Dashboard automation played a large role in providing these new efficiencies, while Cisco Nexus Dashboard Insights provided better visibility, analytics, and real-time insights into the operating state of the infrastructure, thereby making team efforts generally more productive.

In their comments to IDC, companies noted that Cisco Nexus Dashboard could make their business operations more nimble by accelerating time to value and time to market. They noted improved decision-making via Nexus Dashboard, which provided easy reference to needed data to assist with strategic business decisions. Improved customer satisfaction was also called out as the result of better digital experiences.

Study participants elaborated on these and other benefits:

Business could be more nimble (Financial Services):

“There is the benefit of time to value and time to market. So, if the business wants something, we use part of our self-service for the business now, so they don’t have to phone a network engineer to get a change.”

Improved decision-making (Financial Services):

“On the business side, Nexus Dashboard gives us easily referenceable dashboards. So, on the business side, it helps us with our decision-making, e.g., strategic business decisions — what we’re going to focus on, what our priorities are going to be, etc.”

Improved customer satisfaction (Financial Services):

“We’ve definitely seen higher customer satisfaction and a better digital experience in general. Cisco Nexus Dashboard enabled us to have strong availability, reliability, and resiliency improvements, and the business always complained about that previously. We now run a more stable environment with Cisco Nexus Dashboard.”

Faster time to market (Information Technology):

“We can move quicker as a business and deliver new services faster, because we have faith in that infrastructure with Cisco Nexus Dashboard. It allows us to test a lot of our services and deliver our internal applications quicker. That then unlocks a lot of the consultancy side of our business ... If our consultancy business is unlocked and keeps moving, it will lead in turn to more business for us.”

IDC quantified these anecdotal observations in several key areas, starting with reductions in unplanned downtime. The derived data shows that Cisco Nexus Dashboard equipped organizations with more tools to both manage and mitigate unplanned downtime. Among these services, Cisco Nexus Dashboard Insights was used to increase visibility and identify potential issues while providing recommendations to ameliorate them.

Table 8 quantifies these benefits. After deployment, 29% fewer disruptive events occurred annually. When issues did occur, they were able to be resolved 23% faster. These two improvements combined resulted in a 50% improvement in productivity that was lost due to disruptions in network performance. IDC calculated that the collective impact of these resulted in annual savings of \$623,100 for the interviewed companies.

TABLE 8
Unplanned Downtime Impact

	Before Cisco Nexus Dashboard	With Cisco Nexus Dashboard	Difference	Benefit
Frequency per year	19.4	13.8	5.6	29%
Time to resolve (hours)	3.5	2.6	0.9	23%
Hours lost per user	0.6	0.3	0.3	50%

[Continued on the next page ►](#)

Table 8 continued from the previous page

	Before Cisco Nexus Dashboard	With Cisco Nexus Dashboard	Difference	Benefit
FTE impact, lost productivity due to unplanned outages	17.9	9.0	8.9	50%
Value of lost productivity	\$1.25M	\$627,500	\$623,100	50%

n = 9; Source: IDC Business Value In-Depth Interviews, September 2023

Fewer disruptive events affecting end-user productivity also had important financial impacts. Study participants reported that minimizing downtime for network-related customer-facing applications enabled their organizations to protect more revenue. As shown in **Table 9**, the total additional revenue that accrued annually was calculated at \$2,328,000.

TABLE 9
Unplanned Downtime Revenue Impact

	Per Organization
Business impact — revenue protected from reduced downtime	
Total additional revenue per year	\$2.328M
Assumed operating margin	15%
Total recognized revenue, IDC model, per year	\$349,200

n = 9; Source: IDC Business Value In-Depth Interviews, September 2023

In terms of the regulatory compliance challenges faced by companies today, interviewed organizations reported that improved visibility into the network infrastructure helped compliance teams with their audit processes. In part, business compliance was improved by reducing the amount of time spent on release notes and guidelines and by getting embedded software recommendations that ensured following predetermined configuration and communication rules. After adoption, interviewed companies saw a 4% improvement in compliance team productivity. IDC calculated that this translated into an annual business value of \$36,100 for each organization (**Table 10**, next page).

TABLE 10

Compliance Staff Impact

	Before Cisco Nexus Dashboard	With Cisco Nexus Dashboard	Difference	Benefit
Compliance team, equivalent FTEs	14.8	14.2	0.5	4%
Salary cost per year per organization	\$1.03M	\$996,400	\$36,100	4%

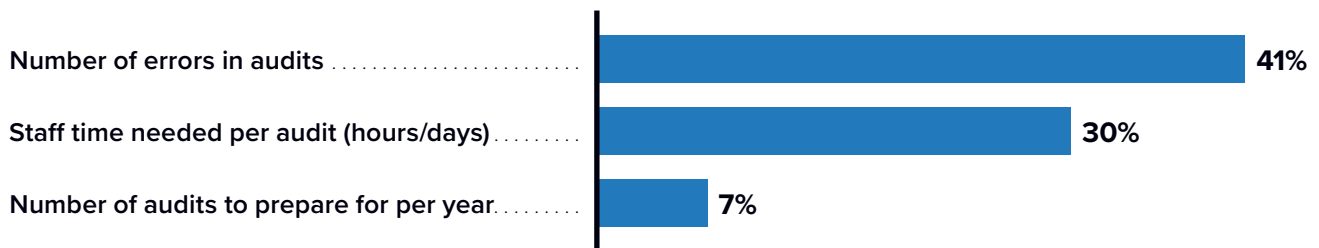
n = 9; Source: IDC Business Value In-Depth Interviews, September 2023

Continuing with compliance, IDC found that Cisco Nexus Dashboard provided better visibility for teams that needed to audit the entire network. **Figure 4** shows that after adoption, the number of errors in audits was reduced by 41%. In addition, the staff time needed per audit was reduced by 30%.

FIGURE 4

Compliance Impact

(% improvement)



n = 9; Source: IDC Business Value In-Depth Interviews, September 2023

All of these business-related improvements cumulatively impacted financial results for the companies that IDC interviewed. In large measure, this was the result of improvements in time to market, which enabled companies to capture more revenue.

IDC quantified revenue gains from better addressing business opportunities. **Table 11** shows significant gains through business enablement, with \$9,843,000 in total additional annual revenue for each organization. Combining revenue protected from reduced downtime and revenue from addressing better business opportunities results in \$12.2 million total new revenue gained/protected per year per organization. IDC’s financial model applies a 15% operating margin assumption, resulting in net revenue gains of an average of \$1,476,000 for each company.

TABLE 11
Business Operations and User Impact

	Per Organization	Per Datacenter
Business impact — revenue from better addressing business opportunities		
Total additional revenue per year	\$9.8430M	\$1.2135M
Assumed operating margin	15%	15%
Total recognized revenue, IDC model, per year	\$1.4760M	\$182,000

n = 9; Source: IDC Business Value In-Depth Interviews, September 2023

As described, end users were more productive because they had a more reliable network supporting their devices and the applications they used to perform their daily work. IDC Business Value calculations confirmed that the use of Cisco Nexus Dashboard had measurable impacts on end-user performance, resulting in a cumulative annual business value of \$1.43 million for each organization (**Table 12**).

TABLE 12
End-User Impact

	Per Organization
Number of users impacted	2,214
Average productivity gains	0.90%
Productive hours gained per organization	5,752

[Continued on the next page ►](#)

Table 12 continued from the previous page

	Per Organization
Productive hours gained per user	0.6
End-user impact, FTE equivalent per organization per year	20.4
Value of end-user time	\$1.43M

n = 9; Source: IDC Business Value In-Depth Interviews, September 2023

ROI Summary

IDC’s analysis of the financial and investment benefits related to study participants’ use of Cisco Nexus Dashboard is presented in **Table 13**. IDC calculates that on a per-organization basis, interviewed organizations will achieve a total discounted three-year benefit of \$13.0 million based on better network management, improved staff productivity, and improved business results. These benefits compare with projected total discounted investment costs over three years of \$2.9 million on a per-organization basis. At these levels of benefits and investment costs, IDC calculates that these organizations will achieve a three-year ROI of 350% and break even on their investment in approximately four months.

TABLE 13
Three-Year ROI Analysis

	Per Organization	Per Datacenter
Benefit (discounted)	\$13.0M	\$1.61M
Investment (discounted)	\$2.90M	\$357,100
Net present value (NPV)	\$10.10M	\$1.25M
ROI (NPV/investment)	350%	350%
Payback (months)	4 months	4 months
Discount factor	12%	12%

n = 9; Source: IDC Business Value In-Depth Interviews, September 2023

Challenges/Opportunities

Cisco Nexus Dashboard and the broader NetOps tooling solutions face challenges from an increasingly complex datacenter infrastructure operational environment — running multitier and high-radix network topologies, convoluted overlay and underlay architectures, multiple infrastructure control points, etc. As IT administrators grapple with a growing array of geographically distributed networks, data sources, infrastructure, environments, monitored objects, security measures, and regulatory policies, Nexus Dashboard noise reduction — and accurately identifying and addressing operationally relevant anomalies — becomes crucial.

That said, we see the ongoing operational challenges as ample opportunities for Cisco Nexus Dashboard to proactively address and therefore capitalize on these IT concerns through technology innovations — such as GenAI LLM-powered tools and AIOps capabilities, as outlined below.

In IDC’s view, Cisco’s Nexus Dashboard could strategically benefit from new feature sets and platform capabilities that would differentiate Nexus Dashboard from a hodgepodge of third-party and open source toolkits. Feature set differentiation is timely as new secular growth drivers, such as generative AI and multicloud networking, are starting to ramp up across industry verticals.

For example:

- Nexus Dashboard could further enhance its network visibility features, paired with NetSecOps telemetry and fine-grained analytics. This is for accelerating troubleshooting, performance management, network and application workload uptime, and improving the overall IT security and governance posture.
- Nexus Dashboard operational metrics could be significantly enhanced by “LLM training” the Nexus platform-generated data sets along with remediation and performance improvement approaches used by ITOps teams. This is for offering a conversational Q&A UI to IT and business decision makers for natural language and visual interactions with a GenAI app that interfaces with the Nexus Dashboard platform. Cisco could monetize the GenAI Dashboard App as an “add-on” Day 2+ NetOps feature.
- AIOps capabilities incorporated in Nexus Dashboard metrics could be further enhanced by using advanced ML models. This is to enable IT teams with timely and accurate network anomaly detection and rapid remediation, root cause analysis, cross-correlating time-series metrics and IT events, etc.

Conclusion

Network infrastructure management is a critical part of an enterprise's digital transformation journey, motivating IT decision makers to reimagine how datacenter networks are provisioned, managed, and operated, seamlessly, across on-premises and cloud provider platforms.

In IDC's view, organizations need to implement integrated datacenter network tooling managed via a single pane of glass. The integrated tooling needs to offer the full life cycle of network infrastructure—managed capabilities, ranging from network provisioning — initial setup, configuration, and automation — to network operations — insights, visibility, analytics, troubleshooting, compliance, etc. IDC notes that network and application resiliency, security posture, staff productivity, operational simplicity, and other IT and business outcomes are significantly enhanced through NetOps unification.

Through a series of in-depth interviews, IDC conducted a Business Value analysis study that examined the value and benefits for organizations using Cisco Nexus Dashboard to support their network management efforts. The project included 10 interviews with companies that had experience with and knowledge about the benefits and costs of using the platform.

Based on extensive quantitative and qualitative data derived from these interviews, IDC calculates that study participants will realize benefits of a 350% three-year ROI by:

- Boosting the overall productivity of network infrastructure management teams, thereby freeing up these teams to better support innovative and business-oriented projects
- Improving the overall productivity of security, help desk, and troubleshooting teams
- Minimizing the effects of unplanned downtime, contributing to greater business productivity and easing the burden on help desk teams

These improvements will make end users more productive and gain new revenues, thereby producing better business results.

Appendix 1: Methodology

IDC's standard ROI methodology was utilized for this project. This methodology is based on gathering data from current users of Cisco Nexus Dashboard.

Based on interviews with these organizations, IDC performed a three-step process to calculate the ROI and payback period:

1. **Gathered quantitative benefit information during the interviews using a before-and-after assessment of the impact of Cisco Nexus Dashboard.** In this study, the benefits included IT cost reductions and avoidances, staff time savings and productivity benefits, and revenue gains.
2. **Created a complete investment (three-year total cost analysis) profile based on the interviews.** Investments go beyond the initial and annual costs of using Cisco Nexus Dashboard and can include additional costs related to migrations, planning, consulting, and staff or user training.
3. **Calculated the ROI and payback period.** IDC conducted a depreciated cash flow analysis of the benefits and investments for the organizations' use of Cisco Nexus Dashboard over a three-year period. ROI is the ratio of the net present value and the discounted investment. The payback period is the point at which cumulative benefits equal the initial investment.

IDC bases the payback period and ROI calculations on a number of assumptions, which are summarized as follows:

- Time values are multiplied by burdened salary (salary + 28% for benefits and overhead) to quantify efficiency and productivity savings. For the purposes of this analysis, IDC has used assumptions of an average fully loaded \$100,000 per year salary for IT staff members and an average fully loaded \$70,000 per year salary for non-IT staff members. IDC assumes that employees work 1,880 hours per year (47 weeks x 40 hours).
- The net present value of the three-year savings is calculated by subtracting the amount that would have been realized by investing the original sum in an instrument yielding a 12% return to allow for the missed opportunity cost. This accounts for both the assumed cost of money and the assumed rate of return.
- Further, because Cisco Nexus Dashboard requires a deployment period, the full benefits of the solution are not available during deployment. To capture this reality, IDC prorates the benefits on a monthly basis and then subtracts the deployment time from the first-year savings.

Note: All numbers in this document may not be exact due to rounding.

Appendix 2: Supplemental Data

This appendix provides an accessible version of the data for the complex figures in this document. Click “Return to original figure” below the table to get back to the original data figure.

FIGURE 1 SUPPLEMENTAL DATA

Impact on Network Infrastructure Team Activities

	Time Spent Keeping the Lights On	Time Spent on Innovation and Other Activities
Before Cisco Nexus Dashboard	50%	50%
With Cisco Nexus Dashboard	34%	66%
Difference	33%	33%

n = 9; Source: IDC Business Value In-Depth Interviews, September 2023

[Return to original figure](#)

About the IDC Analysts



Vijay Bhagavath

Research Vice President, Cloud and Datacenter Networks, IDC

Vijay Bhagavath is IDC's Research Vice President, Cloud and Datacenter Networks. He provides actionable thought leadership and pragmatic insights on cloud and datacenter networking markets and technologies. Vijay has a deep understanding of the overall networking market, technologies, product road maps, competitive differentiation, and deployment strategies, enabling him to provide insightful commentary and guidance for vendors, cloud providers, enterprise IT buyers, and practitioners.

[More about Vijay Bhagavath](#)



Matthew Marden

Research Vice President, Business Value Strategy Practice, IDC

Matthew is responsible for carrying out custom business value research engagements and consulting projects for clients in a number of technology areas with a focus on determining the return on investment of their use of enterprise technologies. Matthew's research often analyzes how organizations are leveraging investment in digital technology solutions and initiatives to create value through efficiencies and business enablement.

[More about Matthew Marden](#)

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IDC Research, Inc.
140 Kendrick Street, Building B, Needham, MA 02494, USA
T +1 508 872 8200

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