ESG Economic Validation

Analyzing the Cost Savings and Economic Benefits of Gigamon

By Jack Poller, Senior Analyst
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Executive Summary

Digital transformation initiatives are prompting organizations to adopt modern IT infrastructures to improve organizational efficiencies and customer experiences. The COVID-19 pandemic and the rapid shift to working from home have reinforced the need for organizations of all sizes to accelerate digital transformation efforts. Thus, IT teams are tasked with enabling massive quantities of new data in a secure and highly available fashion and facilitating new types of access to new types of form factors and data stores. And they must accomplish this transformation under the mandate to "do more with less."

Gigamon

ESG

$1M First Year Savings 4-month Payback

by deploying Gigamon Visibility and Analytics Fabric versus continuing to operate without optimizing for visibility and analytics.

(based on ESG's 5-year cost-benefit model for a modeled organization)

| Accelerate Digital Transformation | Reduce Tooling Costs | Reduce Time & Effort | Reduce Complexity |

ESG validated that the Gigamon Visibility and Analytics Fabric effectively addresses this challenge with a platform that provides visibility into network traffic while reducing the overhead needed to monitor, filter, analyze, and secure data. Gigamon's solution provides application intelligence and network traffic visibility to dataflows of all speeds. The result is increased efficiency of security and performance tools, reducing the required number of tool instances and maintenance expense, and increased security.

ESG validated the benefits that Gigamon customers have experienced through a series of interviews and used the information to model a scenario that shows that a 5,000-employee organization can reduce the cost of their security and performance monitoring tools by 78% through improved tool efficiencies, improved productivity, and value gained from the platform. ESG's model predicts more than $1M savings and a four-month payback period for organizations choosing to implement Gigamon versus continuing to operate without optimizing for visibility and analytics.
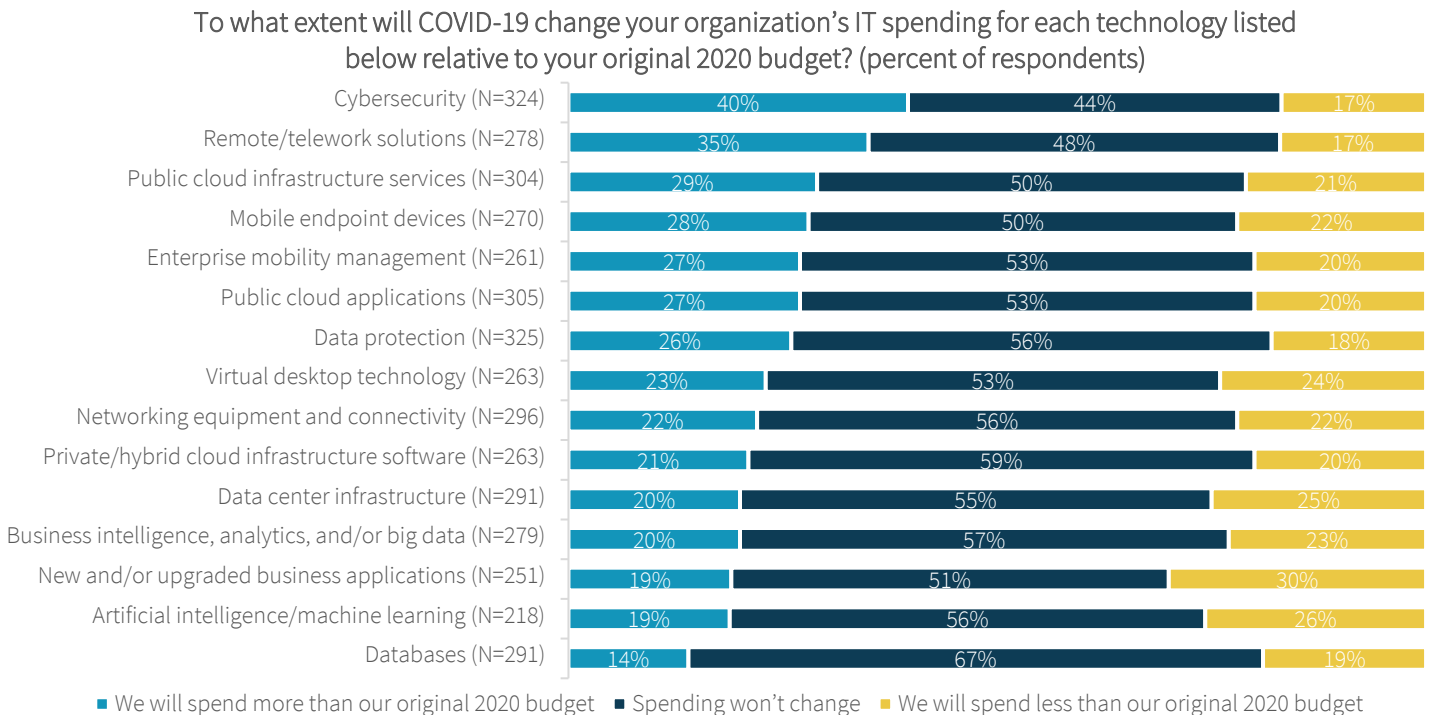
Introduction

This ESG Economic Validation is focused on the changes companies can expect when deploying Gigamon's intelligent network traffic visibility platform. ESG's Economic Validation process is a proven method for understanding, validating, quantifying, and modeling the economic value propositions of a product or solution. The process leverages ESG's core competencies in market and industry analysis, forward-looking research, and technical/economic validation. ESG utilized the expertise of multiple industry analysts in addition to customer conversations to uncover and validate Gigamon's impact on customer critical success factors (CSFs).

Challenges

The march of digital transformation (DX) continues apace. According to ESG research, having implemented and optimized multiple DX initiatives, 19% of organizations consider their DX efforts to be mature, up from 13% in 2018. Another 57% have moved their DX efforts beyond the planning stage. DX initiatives lead directly to leveraging the public cloud, with 47% of mature organizations having a cloud-first policy when it comes to new application deployments. Mature organizations rely much more heavily on public cloud infrastructure than early stage DX organizations (88% compared with 63%) and have few workloads that cannot be migrated to public clouds.[1]

The motivating factors behind DX include the desire to become more operationally efficient (55%) and to provide a better and more differentiated customer experience (49%).[2] Operational efficiency has been impacted by the COVID-19 pandemic, as more than half of organizations report that at least 80% of their workers are now working from home (WFH). The shift to WFH has accelerated the adoption of cloud technologies, including SaaS apps for core business functions and collaboration apps including video conferencing, and shifted technology spending toward solutions that are heavily dependent on networking (see Figure 1).[3]

Figure 1. Top IT Initiatives Impacting Network Infrastructure

To what extent will COVID-19 change your organization's IT spending for each technology listed below relative to your original 2020 budget? (percent of respondents)

	We will spend more than our original 2020 budget	Spending won't change	We will spend less than our original 2020 budget
Cybersecurity (N=324)	40%	44%	17%
Remote/telework solutions (N=278)	35%	48%	17%
Public cloud infrastructure services (N=304)	29%	50%	21%
Mobile endpoint devices (N=270)	28%	50%	22%
Enterprise mobility management (N=261)	27%	53%	20%
Public cloud applications (N=305)	27%	53%	20%
Data protection (N=325)	26%	56%	18%
Virtual desktop technology (N=263)	23%	53%	24%
Networking equipment and connectivity (N=296)	22%	56%	22%
Private/hybrid cloud infrastructure software (N=263)	21%	59%	20%
Data center infrastructure (N=291)	20%	55%	25%
Business intelligence, analytics, and/or big data (N=279)	20%	57%	23%
New and/or upgraded business applications (N=251)	19%	51%	30%
Artificial intelligence/machine learning (N=218)	19%	56%	26%
Databases (N=291)	14%	67%	19%

Source: Enterprise Strategy Group

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[1] Source: ESG Master Survey Results, *2020 Technology Spending Intentions Survey*, January 2020.
[2] Ibid.
[3] Source: ESG Master Survey Results, *Technology Impact of COVID-19: IT Decision Maker (ITDM) View*, May 2020.

Providing network access while understanding and securing data are goals that seem divergent in purpose and often lead to decisions that may limit business opportunities to ensure data availability and integrity. Many companies find themselves layering functionality across multiple products and platforms, often resulting in a jumbled network and security platform that stymies innovation.

The Solution: The Gigamon Visibility and Analytics Fabric

The solution to these challenges is to leverage network traffic as a source of truth to gain a deeper understanding of interactions between different system or application components in the infrastructure. The Gigamon Visibility and Analytics Fabric provides a unified visibility architecture across physical, virtual, and cloud environments, delivering optimized full-fidelity data to security and performance monitoring tools. The result is a more efficient and secure environment that enables businesses to use their data network as a strategic asset to accomplish their goals.

Gigamon's scalable solution accesses, aggregates, enriches, and forwards data in-transit across physical, virtual, and cloud infrastructures. Data is decrypted and secured before distributing to security and performance tools, ensuring visibility of all data in-transit at any network speed. Automated end-to-end processing increases efficiencies via deduplication, flow mapping and filtering, NetFlow processing, and intelligent application processing and filtering.

Whereas switch and router SPAN ports may drop packets when overloaded, Gigamon offloads workloads from routers and switches with physical and virtual network taps, and GigaVUE physical and virtual visibility appliances, ensuring full network visibility. Likewise, where switches and routers typically sample traffic to create NetFlow metadata, the Gigamon Visibility and Analytics Fabric further offloads routers and switches by automatically generating NetFlow records for all traffic. In the cloud, where network traffic data is hard to obtain, the Gigamon Visibility and Analytics Fabric provides a simple approach to getting equivalent network telemetry data, thereby ensuring no loss of visibility for cloud migration projects. Network security and performance monitoring tools, including firewalls, SIEMs, IPS/IDS, NPM, APM, and others, can access just the data each tool needs, reducing the load on the tools and improving network utilization.

Figure 2. The Gigamon Visibility and Analytics Fabric
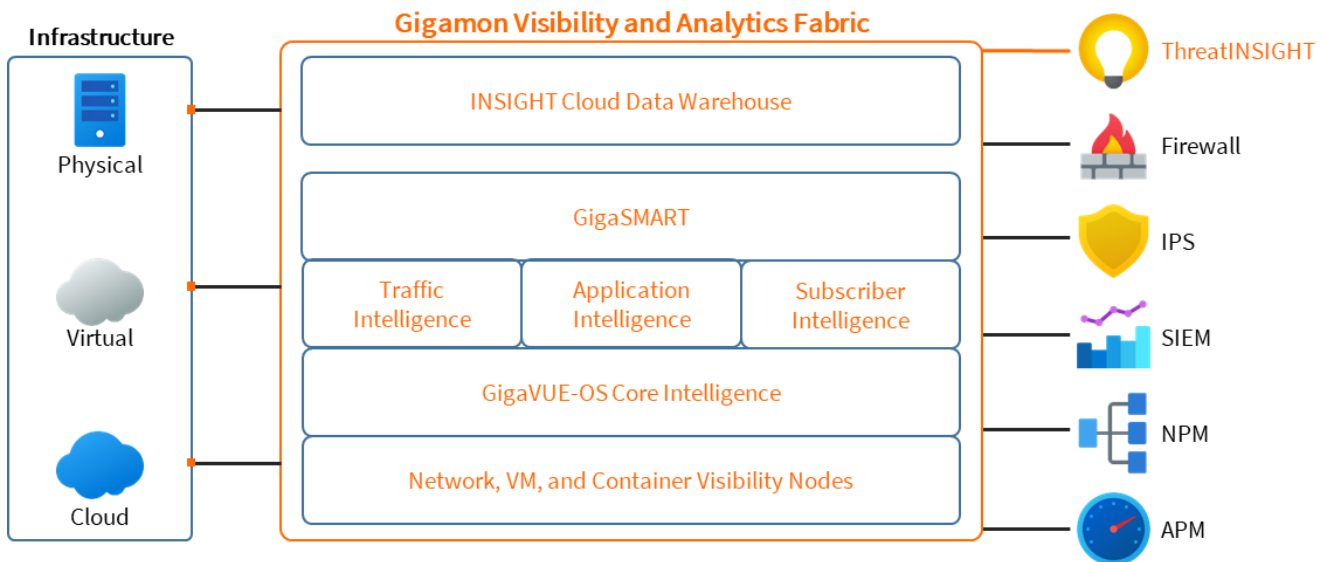
Source: Enterprise Strategy Group

Gigamon's application intelligence identifies more than 3,000 common and proprietary applications using deep packet inspection, enabling users to accurately isolate and extract application traffic. Using fine-grained filters based on knowledge of applications rather than network addresses and port numbers increases efficiency by ensuring security and performance tools process only relevant data and are not overwhelmed by extraneous information. In addition, application

intelligence enables analysts to visualize all applications running on the network, and drill down into individual applications, components, and protocols to understand the source of performance bottlenecks or security vulnerabilities.

The efficiency gains and useability and performance benefits of deploying the Gigamon Visibility and Analytics Fabric enable organizations to position their investment in Gigamon as a component in the entire cost equation for the security and performance monitoring tool stack: the investment in Gigamon is more than offset by increased efficiency, eliminating maintenance for idle tool instances and reducing or eliminating the need to purchase additional tool instances over time.

ESG Economic Validation

ESG's economic analysis uncovered multiple quantifiable and anecdotal examples that show Gigamon provides significant cost and operational benefits when compared with alternative architectures or competitive solutions. The benefits most commonly reported by customers fall into four main categories:

- **Digital transformation**—It often seems the role of network and security managers is to protect the network at the expense of new business opportunities. Gigamon enables IT managers to say, "Yes!" to business leaders' ideas.

- **Reduction in tooling costs**—The ability to provide multiple roles in one platform combined with the right-sizing of hardware and tooling provides savings of 40-50%.

- **Reduction in the time needed to analyze traffic for security**—Gigamon's ability to quickly detect attacks and intrusions helps shift focus from reactive incident responses to a culture of predictive protection.

- **Reduction in complexity**—Complexity is the enemy of efficiency. Gigamon provides superior network traffic visibility while simplifying common operational tasks, leading to enhanced business process efficiency and agility.

Digital Transformation

Changes in IT systems matter most when they enable businesses to increase the likelihood that they will reach their goals. This is especially important with digital transformation where the goals are to increase operational efficiency, provide better customer experiences, develop new data-centric products and services, and develop new business models. Using the Gigamon Visibility and Analytics Fabric to better protect data environments enables companies to grow without the limitations often seen in traditional networking ecosystems.

Deutsche Telekom invested in Gigamon solutions because of their robust and superior architecture and trusted source of high-fidelity data to feed network detection and response tools.

Tobias Schiffhauer, Sr. Monitoring Architect, Deutsche Telekom

- **SecOps, NetOps, and CloudOps alignment**—The goals of security operations (SecOps), network operations (NetOps), and cloud operations (CloudOps) are often conflicting. NetOps and CloudOps are tasked with providing highly reliable access to a rapidly expanding flow of traffic from new access devices and services joining the network at previously unseen rates. SecOps is tasked with protecting an amorphic environment spanning on-premises and the cloud. And that environment is consistently under attack both internally and externally. Pleasing these groups is a daunting task. Gigamon customers report much closer collaboration between their SecOps, NetOps, and CloudOps teams, resulting in a "can do" attitude toward new ideas and challenges following the deployment of the Gigamon Visibility and Analytics Fabric. The flexibility of Gigamon and the ability to closely monitor dataflow and risks help IT enable businesses to succeed.

- **Agility**—New opportunities often become missed opportunities due to the risk associated with rapid change. Business leaders often start by denying new projects due to the IT planning and capital needed to provide access and resources. The flexibility and efficiency of the Gigamon Visibility and Analytics Fabric give decision makers the confidence to lead with project approval because of their confidence that they can quickly provide a secure platform.

- **Reliability and availability**—The modern business world operates around the clock, and customers and employees have become reliant on business services being available from anywhere at any time. Reliable and available networks, applications, and business services are crucial to the user experience. Gigamon provides visibility into network and application behavior and performance, enabling administrators to optimize the IT infrastructure and maximize reliability and availability.

Reduction in Tooling Costs

Gigamon customers report an overall savings of 40-50% on tooling costs when comparing Gigamon with their old environments.

- **Visibility across on-premises, cloud, and virtual environments with one solution**—The explosive growth of cloud-based data and virtualized environments has forced some companies into adopting multiple network and security platforms. As network perimeters disappear, Gigamon's ability to give visibility and protect data regardless of location has eliminated both redundant costs and the need to deploy new solutions as additional data sources/data stores appear.

- **Reduction in tooling**—Customers report an approximate 66% reduction in the number of tool instances needed for network operations when moving to Gigamon. Gigamon's ability to efficiently broker, analyze, filter, and direct data results in a substantial cost savings, all while increasing the visibility of network data by up to 75%.

"Gigamon has enabled us to achieve the maximum effectiveness and efficiency of our security tools by giving us full visibility into all north/south and east/west traffic on our enterprise network while eliminating the risk of placing them inline."

Anthony Chogyoji, Chief Information Security Officer, County of Riverside

- **Reduction in complexity**—In addition to needing fewer tools, customers report a lower cost per tool. Gigamon's data filtering and brokering means that each tool processes significantly less data, enabling customers to "right-size" tools to this reduced workload.

Reduction in the Time Needed to Analyze Traffic for Security

ESG has found that customers using Gigamon have been able to shift focus from incident response to predictive protection activities, resulting in a deeper and wider view into the content of their networks. Users can integrate Gigamon ThreatINSIGHT, a cloud-native network detection and response (NDR) solution, with the Gigamon Visibility and Analytics Fabric. The integrated solution accelerates the effort to find hidden network threats, automates security investigations and responses, and optimizes security workflows and tracking.

Gigamon reduced the overhead needed to filter, analyze, and direct traffic, saving time and eliminating costly upgrades as demand on bandwidth increases month to month. The Gigamon metadata generation capability enables companies to evaluate metadata more completely and efficiently than in their pre-Gigamon environments. Interviewed organizations frequently reported increases in NetFlow performance of more than 100%, all while enjoying inline SSL inspection that allows for more granular scrutiny of data content and a 70% reduction in false positives. The results are better visibility, faster detection, and more control.

Reduction in Complexity

Complexity in IT systems is a double-edged sword. The strategic value of data is immense; however, each addition of data type, store, or device increases the attack surface area. Gigamon customers report a dramatic reduction in complexity of their IT environments when compared with alternative solutions, which results in fewer mistakes and the elimination of barriers to achieving goals.

- **Gigamon Visibility and Analytics Fabric**—The Gigamon environment simplifies the tangled web that many security stacks create, all while providing deeper insight into dataflow and content and increasing the speed at which data can be filtered and analyzed. Gigamon acts as a collector, filter, and broker for data. Real-time filtering grants tools access to only the data relevant for that specific job. This removes the overhead of irrelevant data and allows analysts to focus on the success and security of each essential part of the network.

> *"The Gigamon solution increased our network security visibility by 50% for detecting potential APT malware and malicious communications."*
>
> *Azril Rahim, Sr. Manager, Tenaga Nasional Berhad*

- **Reduction in tools**—Customers are able to eliminate redundant systems and tools when deploying Gigamon. The company's ability to effectively provide multiple network roles across multiple environments while offering a more granular analysis of the data is unmatched.

- **Reduction in downtime**—Network-related downtime is frequently estimated to be between 16 and 20 hours per end-user per year. Companies deploying Gigamon find their downtime numbers reduced by 30-50% due to the efficiency and intuitiveness of the platform. While downtime hours recovered are not always fully measurable to the bottom line, a company of 5,000 employees that recovers just two hours per employee per year will recognize a savings of $290K annually.

- **Reduction in security personnel requirements and cost**—Companies deploying Gigamon have found that the efficiency of their staff increases dramatically, thereby allowing precious manpower to be allocated to higher-value functions and activities. This is especially critical in light of the ongoing global cybersecurity skills shortage— 44% of organizations report a problematic shortage of cybersecurity skills.[4]

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[4] Source: ESG Master Survey Results, *2020 Technology Spending Intentions Survey*, January 2020.

ESG Analysis

ESG leveraged the information collected through vendor-provided material, public and industry knowledge of economics and technologies, and the results of customer interviews to validate an economic benefit model that compares the costs and benefits of implementing the Gigamon Visibility and Analytics Fabric with continuing to operate without Gigamon's technology. ESG's interviews with Gigamon's customers, combined with experience and expertise in economic modeling and technical validation of Gigamon's products helped to form the basis for the modeled scenario.

"The Gigamon Visibility and Analytics Fabric is the best product for passively monitoring network traffic."

Marty Beckman, Sr. Manager, Smithsonian Institution

ESG modeled a prototypical publicly traded US-based organization of over 5,000 employees. The modeled organization moves 100 Gbps network traffic to a set of security and performance monitoring tools including NPM, APM, IDS, DLP, forensics, and NDR, with a 10% annual traffic growth rate.

Gigamon's deduplication, flow filtering, applicating intelligence filtering, and NetFlow creation and filtering resulted in an average 76% reduction in network traffic to the tool suite, with NMP showing a 96% reduction in traffic (see Figure 3). These efficiency improvements eliminate the need to add more instances of tools as network traffic grows.

Figure 3. Reduction in Redundant Traffic when Deploying Gigamon Visibility and Analytics Fabric
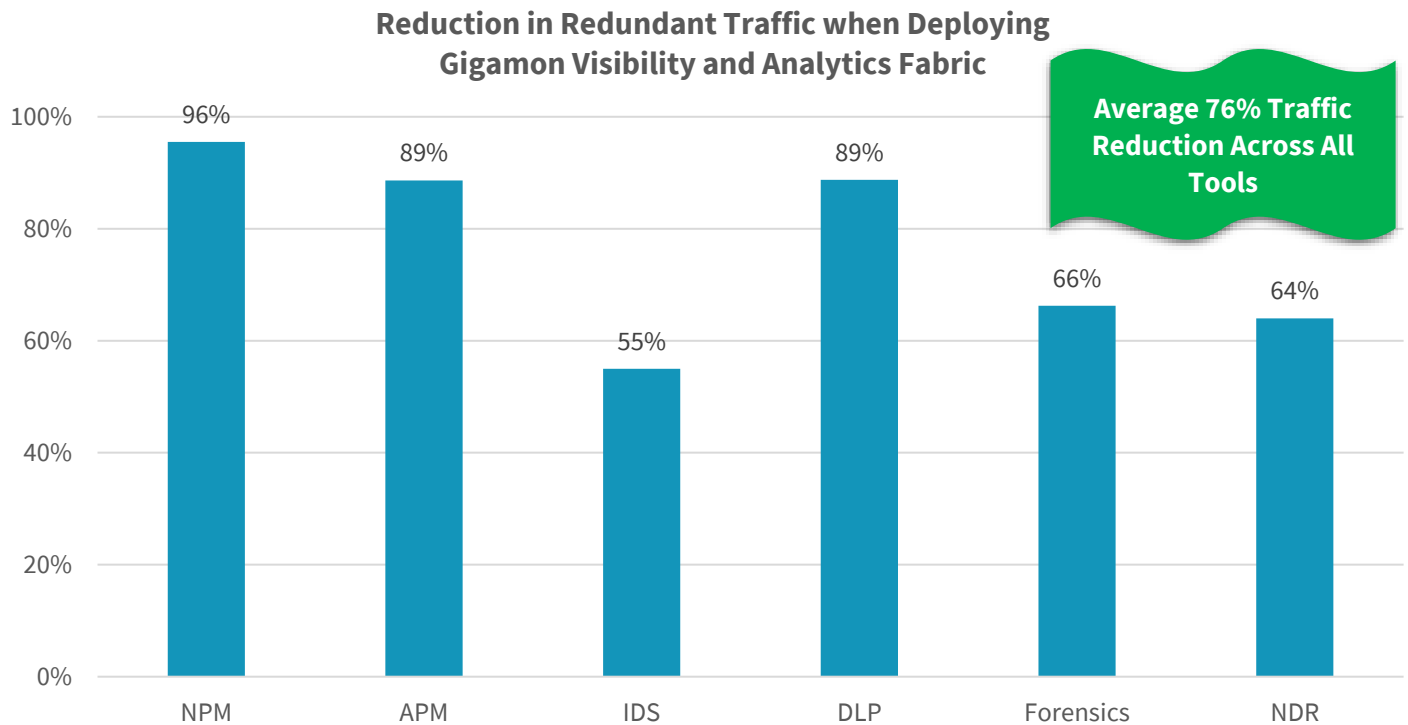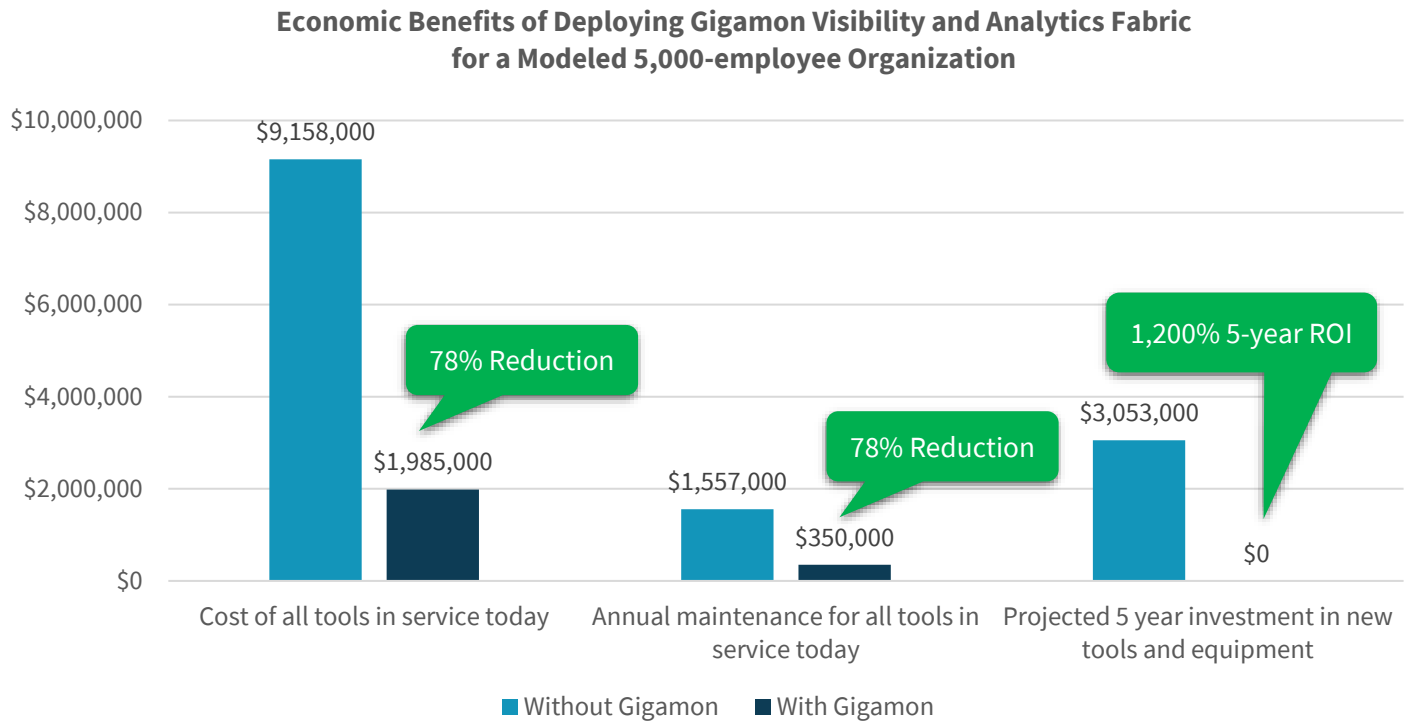

Source: Enterprise Strategy Group

ESG modeled the net economic benefits to the organization based on a five-year deployment. If the organization had deployed the Gigamon Visibility and Analytics Fabric prior to deploying the security and performance monitoring tools, the network efficiency gains would have reduced the required number of instances of each tool. Thus, the organization would have changed its investment in performance and security tools from more than $9 million to less than $2 million, saving over $7 million (see Figure 4).

Simultaneously, by lowering traffic volume, the organization would save $1.2 million on maintenance for idle tools. This savings in maintenance expenditures alone would more than pay for the estimated $250,000 investment in the Gigamon Visibility and Analytics Fabric.

The modeled organization would have to invest an additional $3 million in new tool instances over five years to accommodate the growth in network traffic. The entire additional investment could be avoided thanks to the network efficiencies of the Gigamon Visibility and Analytics Fabric resulting in a 5-year ROI exceeding 1,200%.

Figure 4. Economic Benefits of Deploying Gigamon Visibility and Analytics Fabric

Economic Benefits of Deploying Gigamon Visibility and Analytics Fabric for a Modeled 5,000-employee Organization

Source: Enterprise Strategy Group

What the Numbers Mean

ESG's analysis predicted substantial savings and benefits for our modeled organization. While no modeled scenario could ever accurately represent the economics behind every deployment, ESG has validated Gigamon's Value Calculator, and we encourage organizations to perform their own analysis to see how much they can save. ESG also suggests that organizations consider the following additional Gigamon benefits that are not quantified in the models:

- Accelerates deployment of management and security tools.
- Improves tool and application performance and experience.
- Exposes shadow IT.
- Helps optimize IT infrastructure.
- Speeds data center modernization.
- Accelerates the transition to hybrid multi-cloud.
- Enhances digital transformation.

A large enterprise civil, aerospace, and defense contractor confirms they saved $500,000 to $1,000,000 using Gigamon solutions.

Sr. Network Engineer, Large Enterprise Aerospace & Defense

The Bigger Truth

As organizations embrace digital transformation and the shift to modern hybrid multi-cloud architectures, the infrastructure is both growing and becoming more complex. According to ESG research, nearly two-thirds (64%) of respondents said that their IT environment had become more complex in the last two years. However, IT budgets aren't keeping pace with this growth and complexity, and organizations continue to give their IT leadership the mandate to "do more with less." Thus, organizations seek increased efficiencies, improved business process, and reduced operating expenses from their IT investments.[5]

Gigamon Visibility and Analytics Fabric customers report a 100% increase in NetFlow performance, a protocol that enables effective monitoring of network traffic. Additionally, they see a tightening of security that eliminates 70% of false positives, reduces response-to-threat times, and lowers overall cost for NetOps and SecOps by 40-50%. The agility of the Gigamon Visibility and Analytics Fabric provides an increase in packet-level network visibility of 75%, all while reducing the computing overhead needed to manage and secure the network. Network downtime in Gigamon environments is reported to be 30-50% lower than in traditional environments. Companies find that Gigamon enables growth and allows for a more open approach to new opportunities.

"The Gigamon platform helps reduce the cost and sprawl of our tools while optimizing their effectiveness."

Azril Rahim, Sr. Manager, Tenaga Nasional Berhad

ESG's modeled cost-benefit analysis shows that an organization that deploys the Gigamon Visibility and Analytics Fabric can expect to save through increases in efficiencies, reducing the required number of security and performance tool instances, and lowering maintenance expenditures. The key assumptions in the model were based on ESG's validation with Gigamon's customers. ESG's model for a 5,000-employee organization calculated a potential 78% reduction in maintenance expenses, more than paying for the deployment of Gigamon in just four months. Over five years, the modeled organization can expect a return on investment (ROI) of more than 1,200%.

ESG has carefully studied the impact that adopting the Gigamon Visibility and Analytics Fabric has on companies and found that business are more likely to achieve their goals when utilizing the cost-efficiency, manageability, security, and flexibility that Gigamon provides. ESG customer interviews and conversations with industry analysts have consistently shown that the Gigamon Visibility and Analytics Fabric is a critical tool for success in today's digital age.

ESG strongly recommends that customers consider the Gigamon Visibility and Analytics Fabric for their network management and security needs.

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[5] Ibid.

Enterprise Strategy Group is an IT analyst, research, validation, and strategy firm that provides market intelligence and actionable insight to the global IT community.