



# ROI CASE STUDIES

## HIGHLIGHTS

**Goal:** Leading fiber network services provider wanted to grow strategically while offering the highest level of service and reliability to customers of its managed services network, with a minimum total cost of ownership.

**Solution:** The Company chose Fujitsu’s Network Operations Center (NOC) management service to manage its mission-critical network.

**Results:** By choosing Fujitsu NOC services, the Company guaranteed its customers the highest level of reliability for multiple types of network services. It will see a projected, cumulative two-year net benefit of \$1,886,046 from the project, driven by a lower cost of outsourcing the construction, management, maintenance and troubleshooting inherent in a NOC infrastructure, and by reducing administrative and other costs related to running a NOC. The project has an ROI of 3197% with a payback period of one month.

## Premier Fiber Network Provider Achieves Highest Levels of Service & Reliability with Fujitsu Network Operations Center Services – Gains \$1.9 Million in Benefits

A leading provider of high performance, high bandwidth fiber optic network services saw an opportunity for significant growth by offering premium managed network services.

In order to offer these services, the Company had to provide the best network support services possible for its customers. It had to determine whether to build and run a Network Operations Center (NOC) or to outsource its NOC operations. Whether in-house or outsourced, the NOC solution had to provide highly reliable network services for its customers, offer the lowest cost of ownership, manage a wide variety of services, be staffed by experts with the most extensive skill sets, and accommodate future growth.

The fiber network services provider chose to outsource the management of its network services to Fujitsu, thus providing the service at significantly lower costs, and highest quality.

By choosing the Fujitsu NOC services, the Company guarantees its customers will receive the highest level of reliability for multiple types of network services while providing Company personnel and its customers access to highly trained technical staff.

By outsourcing to Fujitsu rather than building and running a NOC on its own, it will see a projected, cumulative two-year net benefit of \$1,886,046, driven by a lower cost of outsourcing the construction, management, maintenance and troubleshooting inherent in a NOC infrastructure and by reducing administrative and other costs related to running a NOC. The project has an ROI of 3197%, and a payback period of one month.

### Benefits

Objective	Benefits Achieved
Provide reliable network services to its customers	Using the Fujitsu NOC service ensures that the fiber network services provider’s customers receive the highest level of service and meet service level agreements (SLAs).
Accommodate growth at a reasonable cost	With the Fujitsu NOC service, the Company can scale services on an incremental basis, without having to buy additional hardware or hire additional staff.
Reduce costs	By using the Fujitsu NOC service, the Company does not have to build and maintain its own NOC, leading to a projected, cumulative two-year net benefit of \$1,886,046.



### The Challenge: Provide Highly Reliable Network Services at the Lowest Cost while Managing for Future Growth

A leading provider of high performance, high bandwidth fiber optic network services was faced with the challenge of how to expand its business while maintaining the highest levels of service and reliability. The Company, a successful provider of infrastructure solutions and strategic network design services in 21 markets, including nine primary metro markets, saw an opportunity for driving significant growth by changing its business model. Instead of continuing as solely a “dark fiber” infrastructure provider with a fully owned fiber network, the Company decided to pave the way for future growth by offering premium managed network services such as Ethernet, SONET, and wavelength connectivity options to enterprises, government customers, content providers, and other service providers.

To successfully offer these services, the Company knew it was critical to provide the best network support possible for its customers. Therefore, it had to determine the best method for managing the network and its services—whether to build and run a Network Operations Center (NOC), or to outsource NOC operations. Whether in-house or outsourced, the NOC solution had to accomplish the following:

- **Provide highly reliable service.** Succeeding in the very competitive market required offering customers a superior networking experience.
- **Offer the lowest cost of ownership.** Infrastructure, maintenance, and staffing costs for managing network services can quickly become prohibitive. The solution had to be affordable as well as reliable.
- **Manage a wide variety of services.** Network experts are at a premium. Hiring and retaining these experts is expensive and difficult. Also, many network experts have one or two specific skill sets, rather than have broad knowledge of many different kinds of networking services and technologies. The fiber network provider had to ensure it would always have access to highly trained experts in a variety of network technologies.
- **Employ expert staff with the most extensive skill sets.** Network experts are at a premium. Hiring and retaining these experts is expensive and difficult. Also, many network experts have one or two specific skill sets, rather than have broad knowledge of many different kinds of networking services and technologies. The fiber network provider had to ensure it would always have access to highly trained experts in a variety of network technologies.
- **Accommodate future growth.** The Company was growing between 20–30% a year and it required flexibility and fast, easy scalability.

“We were looking for the most cost-effective way to provide the highest level of service to our customers,” explains the Executive Vice President of Sales and Marketing. “That was the key to our ability to expand into new markets.”



### Fiber Network Provider Chooses Fujitsu Network Operations Center Services

After conducting an in-depth comparison of the Fujitsu NOC service versus building a NOC and managing network services internally, the fiber network service provider chose to outsource the management of its network services to Fujitsu. The analysis determined that Fujitsu could offer the service for a significantly lower cost, while offering the highest level of service possible.

“It would have been prohibitively expensive to build a NOC that would offer the level of reliability we required,” says the Company’s Marketing Manager. “When we looked around for service providers, we quickly realized that Fujitsu was the ideal partner. We chose them based on the quality of their services, their reliability as well as their ability to manage a wide variety of transport products. We were impressed with their skill at supporting a large portion of the metropolitan transport market all the way from Ethernet to wavelengths.”

Because of the widespread geographic distribution of the Company’s services, it would have had to staff multiple locations to manage network services, which could be prohibitively expensive.

Since the Company used Fujitsu equipment on its network, it chose a bundled approach where the equipment vendor provides the support services. “Fujitsu had the most expertise in managing its own hardware and other vendors’ hardware as well.”

The fiber network services provider also fully realized the importance of having two fully redundant Fujitsu NOCs located in Sunnyvale, California, and Richardson, Texas. “Having access to a redundant facility was a big differentiator that separated Fujitsu from the competition.”

The fiber network provider’s customers were very pleased to learn that Fujitsu was providing their NOC services. “It added an additional level of trust and reliability for our customers. The fact that Fujitsu stands behind their service is very important to our customers.”

The Fujitsu NOC service provides full monitoring and management services, including fault and performance management, configuration and circuit resource management, inventory management, and data communications network management. All monitoring and troubleshooting efforts are operational seven days a week, twenty-four hours a day, three hundred and sixty-five days a year by highly trained network engineers.

#### The Bottom Line

By choosing the Fujitsu NOC services, the premier fiber network service provider guarantees its customers will receive the highest level of reliability for multiple types of network services while providing the Company’s personnel and its customers access to highly trained technical staff. Now, the Company can easily scale the services it provides to existing and new customers, because it can offer new managed services without having to buy additional hardware, augment a NOC infrastructure, or hire additional staff.

“ We have been able to attract new customers more easily and keep our existing customers because of our use of the Fujitsu NOC service. Fujitsu offers the highest level of service possible and our customers recognize that. ”

— Executive Vice President of Sales and Marketing



“The Fujitsu NOC service has saved us a considerable amount of money, which has positively impacted our bottom line. We expect those savings to extend well into the future, because with Fujitsu’s NOC service, we can more easily scale, without incurring additional costs.”

— Marketing Manager

The choice of Fujitsu has also resulted in significant financial benefits. By outsourcing to Fujitsu rather than building and running its own NOC, the Company will see a projected, cumulative two-year net benefit of \$1,886,046, driven by the reduced cost requirements of building, managing, maintaining, and troubleshooting NOC infrastructure, and by eliminating administrative and other costs related to running a NOC. The project has an ROI of 3197%, and a payback period of one month.

The projected, cumulative savings are \$900,000 over two years in recurring costs if the provider had built and maintained its own NOC. The costs include buying and maintaining hardware and infrastructure, leasing data center space, providing air conditioning and similar costs.

The fiber network provider will also save a projected, cumulative \$900,000 over two years because it will not have to hire staff to build and maintain a NOC and provide technical support services. In addition, it will save a projected, cumulative \$90,000 in training and similar costs.

Because the Company does not have to buy hardware and infrastructure or hire engineers to manage the network, it can more easily scale its business on an incremental basis. It is also assured of having access to engineers with the highest level of technical expertise, who can manage a wide range of services and will be trained on any future services it may provide.

Beyond the financial payback is something even more important for the growing fiber network provider — the ability to offer reliable, high-quality services and maintain the loyalty of its customers. The Fujitsu NOC service has ensured that the Company continues to meet its customers’ Service Level Agreements. And because Fujitsu manages the network, the fiber network services provider can focus on growing its business, without having to spend money and resources on network management.

“Fujitsu allows us to be proactive with our customers,” the EVP of Sales and Marketing concludes. “Fujitsu has made sure that we quickly resolve any problems and respond to our customers’ needs. They also find problems before customers even notice them. With Fujitsu’s help, we have been able to offer a very high-quality product, and that has been the key to our success.”



■ **The bottom line:** A projected, cumulative two-year net benefit of \$1,886,046—driven by eliminating the need to build, manage, maintain, and troubleshoot a network operations center (NOC) infrastructure, and by reducing administrative and other costs related to running a NOC. An ROI of 3197% and a payback period of one month.

The following chart provides a detailed, two-year analysis.

Project Summary	
ROI	3197%
Payback Period (in months)	1
Cumulative Net Value	\$1,886,046

  

Project Costs	Year 1	Year 2	TOTAL
Total Project Costs	\$26,997	\$26,997	\$58,994

  

Benefits	Year 1	Year 2	TOTAL
NOC Recurring Cost Avoidance	\$450,000	\$450,000	\$900,000
Administrative Savings	\$468,000	\$482,040	\$950,040
Additional Cost Avoidance	\$95,000		\$95,000
Total Benefits	\$918,000	\$932,040	\$1,945,040

  

Financial Analysis	Year 1	Year 2
Net Value	\$981,003	\$905,043
Cumulative Net Value	\$1,071,003	\$1,886,046
Net Present Value	\$1,669,191	
Payback Period (in months)	1	
ROI	3197%	

Return on Investment (ROI) is the percentage return expected over a specified period of time. ROI is the total benefit divided by the total costs. This ROI metric is good for assessing the multiplier provided by the benefits relative to the total investment and costs.

Net Present Value (NPV) represents the cumulative present value of the expected return of a project over a specified period of time minus the initial costs of the project. This figure provides visibility on the actual value of a project, taking into consideration the time value of money—the ongoing benefit of a project in today’s money. NPV illustrates the magnitude of the project and whether the project generates a profit.



Payback Period (or breakeven) is the timeframe it takes for the project to yield a positive cumulative cash flow. Payback Period is a key measurement of risk but does not take into account cash flows after the Payback Period.

ROI, NPV and Payback should be used in conjunction to understand the rate, size and timing of the return.

Net Value (or Net Benefit) is the benefit delivered to the organization for the investment made in the project. Net Value is calculated by taking the total benefit minus the project costs.

#### About Fujitsu

Fujitsu is a leading provider of Information and Communications Technology (ICT)-based business solutions for the global marketplace. With approximately 170,000 employees supporting customers in 70 countries, Fujitsu combines a worldwide corps of systems and services experts with highly reliable computing and communications products and advanced microelectronics to deliver added value to customers. Headquartered in Tokyo, Fujitsu Limited (TSE:6702) reported consolidated revenues of 4.6 trillion yen (US\$50 billion) for the fiscal year ended March 31, 2010. For more information, please see: [www.fujitsu.com](http://www.fujitsu.com).

Fujitsu Network Communications Inc., headquartered in Richardson, Texas, is an innovator in Connection-oriented Ethernet and optical transport technologies. A market leader in packet optical networking solutions, WDM and SONET, Fujitsu offers a broad portfolio of multi-vendor network services as well as end-to-end solutions for design, implementation, migration, support and management of optical networks. The only major optical networking vendor to manufacture its own equipment in North America, Fujitsu has over 450,000 network elements deployed by major North American carriers across the US, Canada, Europe, and Asia. For more information, please see: <http://us.fujitsu.com/telecom>.