



INSURER INCREASES STORAGE CAPACITY, CUTS COSTS AND INCREASES EFFICIENCY

BLUE CROSS BLUE SHIELD OF MASSACHUSETTS

/// BUSINESS VALUE CASE STUDY



Blue Cross Blue Shield of Massachusetts' technology infrastructure could no longer effectively accommodate its rapidly growing data-storage needs. So, the company looked to EDS, an HP company, to implement a storage solution.

CLIENT PROFILE

www.bluecrossma.com

Blue Cross Blue Shield of Massachusetts is an independent, not-for-profit healthcare company providing a wide range of health-care programs and educational services for 2.8 million members

Industry: Healthcare

Headquarters: Boston

Revenue: \$4.9 billion (2004)

Employees: 3,850

Business Need Addressed:
Productivity

Highlights

Goal

For Blue Cross Blue Shield of Massachusetts to increase storage capacity and expand the infrastructure for disaster recovery, while reducing costs.

Solution

Outsourcing storage systems to EDS, which used its Information Lifecycle Management (ILM) strategy for planning, implementing and maintaining a tiered SAN-based solution.

Results

A cumulative, projected three-year net benefit of \$945,000, driven by improved productivity, savings in IT maintenance and troubleshooting, and reduction in lease payments. An ROI of 266 percent and a payback period of one month. Increased storage capacity, faster backups, a robust infrastructure for disaster recovery and a savings in floor space.



EXECUTIVE SUMMARY

"We were looking for a storage solution that would improve performance, give us all the capacity we needed for the next several years, and either maintain or lower our costs."

Tony DeGregorio
Director,
IT Vendor Management Office
Blue Cross Blue Shield
of Massachusetts

Blue Cross Blue Shield of Massachusetts has been adding new members at the rate of approximately 6 percent a year, and expects to have 3 million members by 2007. Its need for data storage is growing faster than subscriber growth, at an annual rate of 20 percent, due to the company's growing use of data and applications, and increased regulatory requirements. Blue Cross Blue Shield of Massachusetts needed to significantly grow its storage capacity to keep up with increasing data needs, and to increase the performance and capacity of its disaster recovery infrastructure. But it also wanted to keep storage costs flat or reduce them, to help hold down its subscriber premiums. To solve the problem, the company turned to EDS for an outsourced solution. EDS built a high-capacity, high-performing SAN-based storage infrastructure, based on EMC hardware, at reduced leasing costs compared to the previous solution. The solution will result in a cumulative, projected three-year net benefit of \$945,000, driven by improved productivity, savings in IT maintenance and troubleshooting, and reduction in lease payments. In addition, Blue Cross Blue Shield of Massachusetts has gained increased storage capacity, faster backups, a robust infrastructure for disaster recovery and a savings in floor space due to the new solution's smaller footprint.

The Challenge: Meet Growing Storage Needs and Enhance Disaster Recovery While Reducing Costs

Blue Cross Blue Shield of Massachusetts has been growing steadily, adding new members at the rate of approximately 6 percent a year, and by 2007 it expects to have 3 million members.

Its need for data storage is growing even faster than subscriber growth, at an annual rate of 20 percent, due to the company's increasing use of data and applications, and regulatory requirements. Among the important applications that require access to vast amounts of data are the company's automated enrollment process, online applications for benefits maintenance, health-management system, and internal BlueWeb home page and associated portal for human resources information.

Blue Cross Blue Shield of Massachusetts also has been expanding its UDB-based data warehouse so that it can better analyze subscriber needs and proactively offer information to them. An example is sending out customized member-centric health information and advice to high-risk members.

In short, Blue Cross Blue Shield of Massachusetts' storage infrastructure was not designed to meet the dramatically expanding storage needs. In addition, the company wanted a more robust disaster recovery system for its existing storage environment.

What Blue Cross Blue Shield of Massachusetts Wanted

Blue Cross Blue Shield of Massachusetts was looking for a storage solution that would do the following:

- **Keep up with expanding storage needs.** The company had to find a way to keep up with its data growth rate of 20 percent a year.
- **Keep costs flat or reduce them.** Blue Cross Blue Shield of Massachusetts wanted to keep its costs at a minimum, as a way to hold down subscriber premiums. It also wanted to develop an agile environment that allowed for changes as business and technology required.
- **Improve performance.** The current storage infrastructure, although sufficient to handle today's demands, had reached its maximum capacity and required upgrades to allow the company to take advantage of new technology features like tiered storage.
- **Form the foundation for a more robust disaster recovery plan.** Blue Cross Blue Shield of Massachusetts wanted to expand its disaster recovery environment to accommodate storage growth and newer, more robust application requirements such as active Web sites and synchronized data replication.
- **Integrate storage into an intelligent data management plan.** Blue Cross Blue Shield of Massachusetts was looking for a storage solution that would fit into the company's overall strategy for managing data.

“EDS proactively applied its considerable technical skills and its ability to leverage strategic partners such as Cisco on our behalf to build a cost-effective solution that handled all of our data needs today and into the future.”

Tony DeGregorio
Director,
IT Vendor Management Office
Blue Cross Blue Shield
of Massachusetts

Blue Cross Blue Shield of Massachusetts Chooses EDS

Blue Cross Blue Shield of Massachusetts chose EDS, which developed two storage options, and whose solutions were superior to those of its competitors. In addition to choosing EDS due to its superior proposal, Blue Cross Blue Shield of Massachusetts also chose EDS based on its long working relationship with the company. EDS has served in the role of Blue Cross Blue Shield of Massachusetts' IT partner for more than 30 years.

For the storage solution, EDS collaborated with EDS Agility Alliance partners EMC and Cisco, industry leaders in storage and networking, respectively, to jointly engineer and implement an innovative storage solution designed to increase storage capacity, improve productivity, reduce costs and enhance ROI.

The EDS solution is based on its Information Lifecycle Management (ILM) strategy. The SAN-based infrastructure is a tiered-storage solution, which classifies data by its business value to save on storage costs and achieve regulatory compliance. The tiered storage gives Blue Cross Blue Shield of Massachusetts maximum flexibility and ensures that data is stored on the right device at the right price. The most important data is stored on the highest-performing and most robust tier, and less-important data is stored on less costly tiers, which holds down costs.

No other IT service provider offers the robust tiered storage services that EDS does. EDS' services range from primary storage, to backup, protection and recovery services to archival services. It delivers those services using EMC and Cisco's best-in-breed technologies.

The Bottom Line for Blue Cross Blue Shield of Massachusetts

EDS proposed a new storage infrastructure that would meet Blue Cross Blue Shield of Massachusetts' future storage infrastructure demands, while reducing the overall cost. EDS partnered with its Alliance partners EMC and Cisco to design and implement the most advanced storage infrastructure in the marketplace, encompassing tiered storage, leading-edge virtual SANs and redundant disaster recovery facilities. EDS held many design meetings with these partners and presented a compelling architecture to Blue Cross Blue Shield of Massachusetts that far exceeded all of its technical needs while achieving a more predictable, lower overall storage cost.

A detailed analysis of the implementation shows that Blue Cross Blue Shield of Massachusetts will realize a cumulative, projected three-year net benefit of \$945,000 from the project, driven by improved productivity, savings in IT maintenance and trouble-shooting, and reductions in lease payments. The project is expected to yield an ROI of 266 percent and has a payback period of one month. In addition to the savings, Blue Cross Blue Shield of Massachusetts gains increased storage capacity, faster backups, a robust infrastructure for disaster recovery and a savings in floor space due to the new solution's smaller footprint.

Most of the savings will come from increased productivity due to faster application and backup performance, and reduced IT maintenance and troubleshooting costs, for a cumulative projected three-year benefit of \$885,000. Storage performance has improved fourfold. The data warehouse application has seen a significant performance improvement - queries can be done anywhere from two to three times faster, and there is a significant decrease in the time it takes to run reports. In addition, the IT staff now can diagnose and resolve performance problems faster, field fewer help desk calls dealing with common and repetitive users errors, and spend less time training users.

Monthly bulk load times have been reduced by up to 80 percent, which will shrink load-time windows and prevent user errors or downtime that would otherwise drive up the number of IT support calls.

Blue Cross Blue Shield of Massachusetts will also save \$90,000 over the three-year term of the project in reduced lease payments. Previously, the company was paying \$210,000 per year for its leases; it now pays \$180,000 per year. In addition, by outsourcing its storage to EDS, Blue Cross Blue Shield of Massachusetts manages a stable run rate for budgetary analysis.

Blue Cross Blue Shield of Massachusetts' bottom line for the project:

A cumulative, projected three-year net benefit of \$945,000, driven by improved productivity, savings in IT maintenance and troubleshooting, and reduction in lease payments.

An ROI of 266 percent and a payback period of one month. Increased storage capacity, faster backups, a robust infrastructure for disaster recovery, and a savings in floor space due to the new solution's smaller footprint.

Figure 1: Detailed Three-Year Financial Analysis

Project Summary

Project Costs	Start Up	Year 1	Year 2	Year 3	Total
Current Lease Payments		\$180,000	\$180,000	\$180,000	\$540,000
Project Management Fee	\$30,000				\$30,000
Total Project Costs	\$30,000	\$180,000	\$180,000	\$180,000	\$570,000

Project Benefits	Start Up	Year 1	Year 2	Year 3	Total
Former Lease Payments*		\$210,000	\$210,000	\$210,000	\$630,000
Increased Productivity		\$295,000	\$295,000	\$295,000	\$885,000
Total Benefits		\$505,000	\$505,000	\$505,000	\$1,515,000

Financial Analysis		Year 1	Year 2	Year 3
Net Value	(\$30,000)	\$325,000	\$325,000	\$325,000
Cumulative Net Value	(\$30,000)	\$295,000	\$620,000	\$945,000
Net Present Value	\$792,671			
Payback Period (in months)	1			
ROI	266%			
IRR	1083%			

Explanation of Calculations

* The actual savings in lease payments are \$30,000 per year, for a total of \$90,000 over three years. The savings are calculated by subtracting the current lease payments (\$180,000 per year), from the former lease payments (\$210,000 per year).

Return on Investment (ROI) is the percentage return expected over a specified period of time. ROI is the total benefit minus the total costs in years 1-3 divided by the total costs. The ROI metric is good for assessing the net value benefit of the project relative to the initial investment.

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 dollar 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 dollars. NPV reflects the magnitude of the project and demonstrates whether the project generates a profit. (For the purpose of these calculations, the net value was "discounted" at 9 percent - the cost of capital used in the analysis is 9 percent.)

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

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

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

Internal Rate of Return (IRR) is the implied rate of return of an investment assuming complete reinvestment of cash flows. It is the percentage rate by which the benefits are discounted until the point that benefits are equal to the costs. IRR is calculated as the discount rate necessary to drive the NPV to zero.

Blue Cross Blue Shield of Massachusetts Looks to the Future

The new storage infrastructure takes up less floor space than did the previous infrastructure - a significant benefit in Boston, where rent can be extremely high. Blue Cross Blue Shield of Massachusetts will be able to use that space for other core functions.

EDS has also put Blue Cross Blue Shield of Massachusetts on the path to ILM (Information Lifecycle Management), which can help the company streamline data management and protection, eliminate duplication, and give employees access to the vast array of information that is often difficult to reach efficiently.

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About EDS

EDS, an HP company, is a leading global technology services provider, delivering business solutions to its customers. EDS founded the information technology outsourcing industry more than 46 years ago. Today, EDS delivers a broad portfolio of information technology and business process outsourcing services to customers in the manufacturing, financial services, healthcare, communications, energy, transportation, and consumer and retail industries, and to governments around the world.

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