

ROI Profile: Microsoft BizTalk Server — Pennsylvania

THE BOTTOM LINE

The Pennsylvania Open for Business initiative supported by Microsoft BizTalk Server achieved a positive ROI by streamlining interagency and business interaction and reducing the need for manual data entry.

ROI: 263%

Payback: 5 months

THE ORGANIZATION

The commonwealth of Pennsylvania is the sixth largest U.S. state in terms of population, with more than 12 million citizens. Pennsylvania has a gross commonwealth product of more than \$350 billion per year.

THE CHALLENGE

In early 2001, the governor of the commonwealth of Pennsylvania issued a directive: establish a single electronic entry point for registering a company by Labor Day 2001. The goal of the Pennsylvania Open for Business initiative was to provide entrepreneurs and businesses with access to all the information and forms they needed electronically in one place, reducing the time and effort needed to start and maintain a business in Pennsylvania while reducing the cost to the commonwealth of administering businesses.

The commonwealth needed to rapidly deploy an interactive Web site that could support secure data entry by individuals using a Web browser. The solution needed to support delivery of appropriate forms and information based on user needs and profiles, to manage and deliver data from the Web site to various departments, and to support automatic transfer of information between agencies and applications.

THE STRATEGY

In April 2001, the commonwealth planned to develop an interactive Web-based interview site that would support a single entry point for businesses. After exploring various technology options, it decided in June 2001 to use Microsoft BizTalk Server as the platform for the Open for Business initiative, for the following reasons:

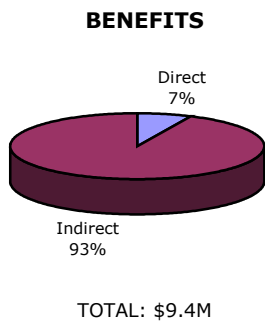
- Mapping features and XML schemas in BizTalk Server would support the need to deliver information in different formats to applications and legacy systems at each agency and to support interagency information transfer.
- The commonwealth had already standardized on Microsoft technology, so the BizTalk Server could be easily integrated with the existing technology environment.

The commonwealth deployed BizTalk Server in the summer of 2001, using a hub-and-spoke model to centrally gather information and distribute it to applications, legacy systems, and mainframes as needed. BizTalk Server licenses and maintenance were purchased for eight processors, and the commonwealth used both an external consulting

group and Microsoft consultants to support rapid development and deployment of the solution.

Because the initiative supported communication between agencies that traditionally had not communicated horizontally, training and cultural adaptation was an important facet of the BizTalk Server deployment. The governor's directive was a large incentive for users to support the new system; however, supporting deployment and training across the agencies and distributing informational CDs to users were also needed to support adoption.

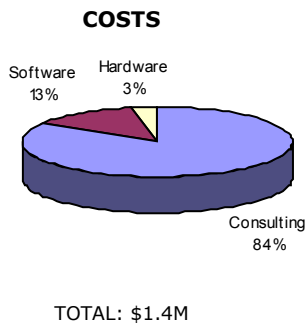
The solution went live in September 2001, enabling businesses to access one site to register for incorporation, tax licenses, worker's compensation insurance, and other administrative needs. The solution also supports delivery of information and forms on request to users, and agency-to-agency transmission of data automatically as needed. The commonwealth plans to incorporate more features and agencies in the solution over time as the initiative evolves.



KEY BENEFIT AREAS

The Pennsylvania Open for Business initiative supported by the BizTalk Server has enabled the commonwealth to be easier to do business with and has also provided the following key benefits:

- Reduced data entry and transmission costs. Automated data entry has eliminated the time needed for the departments of state, revenue, and industry and labor to enter data from paper forms into various applications and systems, and automated transmission of the data from agency to agency has eliminated the need for extracting, manually sending, and inputting data from system to system.
- Reduced errors and omissions. Automatic entry of data has reduced the number of errors associated with rekeying and manually inputting data, reducing the amount of intervention needed to ensure accurate data.
- Reduced paper, printing, and postage costs. Elimination of much of the need for paper forms has enabled the commonwealth to reduce the cost of paper, printing, and postage.



KEY COST AREAS

The largest cost area of the deployment was consulting, making up 84% of the total cost of the project. The commonwealth's primary goal was to meet the governor's launch deadline, so it budgeted for "rush" consulting work. Training and personnel costs amounted to less than 1 percent of the total project cost.

LESSONS LEARNED

Because the commonwealth's project required participation and adoption by a number of different agencies that had their own culture and way of working, gaining agency buy-in at the beginning of the project was critical to ensuring adoption. The establishment of business rules and workflow processes with the agencies at the beginning of the project drove the agency representatives to clearly articulate their needs and processes and reduce the amount of rework in the design and development process.

CALCULATING THE ROI

Nucleus Research analyzed the costs of software, hardware, personnel, training, and consulting associated with the commonwealth of Pennsylvania's BizTalk Server project. Because the commonwealth invested in additional "rush" consulting fees to ensure it would meet its deployment deadlines, those additional fees were not included in the ROI analysis of the project because they did not reflect the actual development needs of the project had it been on a normal time line.

To determine indirect returns from the solution, Nucleus Research calculated the time savings by the fully loaded cost per hour of employees of different agencies involved. Direct returns were calculated based on paper and postage savings experienced.

State of Pennsylvania

SUMMARY

Project:	Microsoft BizTalk Server
Annual return on investment (ROI)	263%
Payback period (years)	0.43
Net present value (NPV)	2,846,524
Average yearly cost of ownership	473,778

ANNUAL BENEFITS	Pre-start	Year 1	Year 2	Year 3
Direct	0	210,000	231,000	254,100
Indirect	0	2,628,846	2,879,231	3,154,654
Total Benefits per Period	0	2,838,846	3,110,231	3,408,754

DEPRECIATED ASSETS	Pre-start	Year 1	Year 2	Year 3
Software	0	0	0	0
Hardware	0	0	0	0
Total per Period	0	0	0	0

DEPRECIATION SCHEDULE	Pre-start	Year 1	Year 2	Year 3
Software	0	0	0	0
Hardware	0	0	0	0
Total per Period	0	0	0	0

EXPENSED COSTS	Pre-start	Year 1	Year 2	Year 3
Software	103,000	25,000	25,000	25,000
Hardware	42,833	0	0	0
Consulting	1,008,000	132,000	30,000	30,000
Personnel	0	0	0	0
Training	500	0	0	0
Other	0	0	0	0
Total per Period	1,154,333	157,000	55,000	55,000

FINANCIAL ANALYSIS	Results	Year 1	Year 2	Year 3
Net cash flow before taxes		2,681,846	3,055,231	3,353,754
Net cash flow after taxes		1,340,923	1,527,616	1,676,877
Annual ROI - direct and indirect benefits		232%	249%	263%
Annual ROI - direct benefits only		5%	10%	12%
Net present value (NPV)		588,854	1,743,950	2,846,524
Payback (years)	0.43			
Average annual cost of ownership		1,311,333	683,167	473,778
3-year cumulative ROI	593%			
3-year IRR	237%			

FINANCIAL ASSUMPTIONS

All government taxes	50%
Discount rate	15%

All calculations are based on Nucleus Research's independent analysis of the expected costs and benefits associated with the application profiled in the accompanying case. Financial modeling tool, format, and methodology copyright Nucleus Research, Inc. All rights reserved.