



ROI EVALUATION REPORT MICROSOFT BIZTALK SERVER

THE BOTTOM LINE

Microsoft BizTalk Server provides a competitive advantage to Independent Software Vendors (ISVs) through its open standards-based technology that delivers a repeatable platform for building integration solutions for customers. Employing BizTalk Server, rather than building custom coded solutions, reduces the expense of development, provides an attractive price point that can increase an ISV's profit margin, and delivers customers with a cost-effective solution for tackling their integration projects.

INTRODUCTION

This report explores the costs and benefits associated with an Independent Software Vendor (ISV) incorporating Microsoft BizTalk Server as part of its commercially developed and marketed solution. To gather data on these costs and benefits, Nucleus conducted in-depth interviews with Microsoft ISV partners. The data contained in this report comes from the information gathered in the interviews. The accompanying Nucleus Research financial modeling tool can be used by an ISV to calculate the ROI potential of integrating BizTalk Server into its product set.

Microsoft BizTalk Server

Microsoft BizTalk Server is a platform for enterprise application integration and business process management. The product provides visual tools for designing and developing integrations between applications and data sources, and creating and maintaining the business processes that are impacted by the application. A key advantage of BizTalk Server is its ability to separate these two functions, enabling business users to focus on rules and process definition, while developers can focus on the technical details of connecting the data sources that drive the application.

Key functionality areas of the product include the development environment, orchestration, rules engine, and business activity monitoring.

Development Environment. The BizTalk Server development environment provides graphical, drag-and-drop modeling and mapping tools that are built on Microsoft Visual Studio.NET. Leveraging Visual Studio.NET allows developers to build applications using the same tools with which they are already familiar. BizTalk Server provides a central point for integration design and implementation, enabling developers to design and map processes within BizTalk Server and link applications to the server in a loosely coupled fashion. This approach enables changes in the integrated applications and data sources without affecting other

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applications—only the modified component’s connection to BizTalk Server is impacted. The key tools in BizTalk Server include the following:

- **BizTalk Schema Editor** enables developers to create, edit, and manage XML document specifications and schemas using a graphical interface. It also includes document specification templates for standard documents such as invoices, shipping notices, and purchase orders.
- **BizTalk Orchestration Designer** provides a graphical canvas for visually defining complex, transactional business processes. Developers can pull from a library of pre-defined process elements to assemble complex business processes. Business process definitions can be first designed in Microsoft Visio and then imported into Visual Studio.
- **BizTalk Mapper** supports transformation of documents from one format to another as needed. Developers can model and manage data transformations using functional objects and a graphical user interface. Developers can pull from a library of pre-defined transformation functions to assemble complex transformations.
- **BizTalk Explorer** enables a user to view and manage the configuration details of an integration project. Included in these management tasks are viewing databases and assemblies, deploying and changing business processes, creating and editing ports, roles, and parties, and enlisting parties into roles.

BizTalk Server also includes server administration tools that enable administrators to efficiently and effectively manage and control all installations of BizTalk Server. This includes managing the security configuration, such as managing accounts, certificates, and passwords.

Orchestration. Orchestration is the term, and the mechanism, used for automating business processes with BizTalk Server. In addition to implementing a business process through a programming language, BizTalk Server provides business users with a graphical tool set to define and implement business processes and the business rules contained within the processes. Business users with in-depth understanding of the processes can design the different steps in the process with BizTalk Orchestration Designer. Once the process has been designed, developers can use BizTalk Mapper and Editor to implement the supporting steps necessary to deliver and exchange data in the applications impacted by the process.

Rules Engine. Business users can also create and modify business rules using the Business Rules Composer tool. Once created, the rules are stored in a business rules engine that serves as a central repository. Orchestrations have a programmatic link to the rules engine that enable rules to be invoked as part of an application. One of the benefits of maintaining business rules, and business processes, separately from application code is that changes to business rules can be implemented more rapidly. In addition it makes it easier to share business rules and processes among multiple applications.

Business Activity Monitoring. BizTalk Server contains a Business Activity Monitoring (BAM) framework that enables business users to view and track transactional information. For example, a user may want to track the activity of product shipments to get real-time data to monitor product sales trends. Using the

BAM Activity Wizard feature in BizTalk, the user can indicate which process to monitor, which data to collect, and then deliver the information to a Microsoft Excel pivot table.

Adapter Framework. BizTalk Server's adapter framework provides a common means of creating and managing both pre-built and custom adapters that enable communication between applications, and application components. There are over 200 pre-built adapters available through Microsoft and its partners, including adapters to applications such as SAP, Siebel, Oracle Financials and PeopleSoft, and technology adapters for SOAP, HTTP, SQL, EDI, and SMTP among others.

BizTalk Server ISV Solution Scenarios

There are some common requirements and usage scenarios often stated by ISVs when exploring integration broker solutions like BizTalk Server. The most common scenarios are briefly described below:

- **Line of Business (LOB) application integration.** In this scenario, the ISV seeks to integrate their business application with another commercial, off-the-shelf application, such as an ERP or CRM system. The availability of BizTalk adapters and flexible mapping tools is highly important to the ISV to meet the requirements of this integration project. ISVs often choose to bundle BizTalk Server adapters and pre-built maps as part of their application offering to provide customers with a value-added "accelerator" for LOB application integration.
- **Suite integration.** In this scenario, the ISV has a series of application modules that need to be integrated so that data can be exchanged between all the modules. This situation often results from an application suite developed through acquisitions. In this case, the ability to leverage BizTalk to provide a standard integration framework and common services across the application suite is very important. The ISV can use the BizTalk orchestration or business rules capabilities to automate business process rules that can be shared across the application modules.
- **Standards compliance.** In this scenario, the ISV needs to meet a government or trading partner mandate around a standard message format, such as SWIFT, HIPAA, or RosettaNet. The ability to easily and comprehensively support all of the message schemas and pre-defined processes for an industry standard is important in this case. By incorporating a BizTalk accelerator in its solution, the ISV effectively outsources the maintenance of the message technology standard to Microsoft, giving the ISV greater isolation from changes to the underlying standards, and removing the burden of dedicating internal resources to ensure that the technology is consistent with the changes to the standard.
- **"Edge" integration.** This scenario integrates data from a distributed remote/branch location back to a centralized BizTalk Server hub. An example of this would be integrating banking information from an ATM or branch teller for real-time delivery to the corporate systems in headquarters. This sort of integration project requires reliable, distributed and high performance messaging services from BizTalk Server. Similar examples around POS (point of sale) devices and distributed plant device control are also quite common.

- **Rules/Workflow.** In this scenario, the ISV seeks to replace the embedded logic within its application with a more flexible model using the BizTalk business rules engine. This could include an ISV embedding both complex rule-sets as well as process orchestration that drive the application's behavior as well.
- **Microsoft Office integration.** This scenario seeks to integrate an ISV's application into the Microsoft Office environment, using rich "Smart Documents" technology that directly exposes back-end information and processes through BizTalk Server into Office applications such as InfoPath, Word or Excel. This solution leverages the native XML capabilities of the Office suite in conjunction with BizTalk.
- **Portal integration.** This scenario is similar to the Office integration example; only it transfers data from single or aggregated data sources through BizTalk into a Web-based portal, such as Microsoft SharePoint Portal. In this situation, the ability to invoke BizTalk services in real-time from a composite Web application is an important requirement.

In illustrating these scenarios, each involving a slightly different set of BizTalk Server features to address the integration project, ISVs can see the breadth of solutions that can be developed with BizTalk Server. All of these scenarios also drive a different cost and benefit return model for ISVs considering an investment in BizTalk. Based upon the type of integration scenario under consideration, ISVs can use the accompanying ROI modeling tool to determine the value of BizTalk in driving that business solution for its organization.

Microsoft Partner Program Resources

The Microsoft Partner Program provides technology and support to ISVs that want to incorporate BizTalk Server into their product offerings. There are three program levels—Microsoft Registered Member, Microsoft Certified Partner, Microsoft Gold Certified Partner—that offer a tiered set of benefits based upon the partner's solution expertise and demonstrated competency building and deploying solutions that incorporate Microsoft technology.

All partners receive benefits such as access to a dedicated partner web site, business development resources and tools, prospect exposure through Microsoft online business directories, and collaboration tools to network and explore business opportunities with other Microsoft partners. Technical resources include online training courses, online and telephone technical support, and internal use licenses for Microsoft software.

Microsoft Certified and Certified Gold partners receive additional benefits including presales and post sales support, telephone-based account management, and the ability to include a certified partner logo on marketing and business materials.

ISVs can additionally take advantage of programs designed specifically for them, including:

- **ISV Royalty Program.** This provides the ISV the option to resell BizTalk Server as part of its application, including the ability to use a run-time license version of BizTalk.

- **BizTalk Server ISV Certification Program.** This is a rigorous technical validation program developed with and endorsed by Microsoft, which includes standardized criteria, and comprehensive testing. The program is administered by a third party to provide independent, objective validation that helps deliver greater customer assurance of technical compliance and reliability.
- **BizTalk Server Unified Adapter Support Program.** This is a joint support program for customers of Microsoft and Microsoft partners that provides customers with a cohesive support network through the reach and availability of Microsoft's Global 24/7 Support Network.

KEY BENEFIT AREAS

Nucleus Research has identified three key areas where Microsoft BizTalk Server can deliver returns for ISVs and their customers: reduced product development time, improved product delivery, and reduced cost and complexity for integration projects.

Reduced product development time

Product development is one of the largest cost areas that ISVs incur when preparing a product for market. Time spent designing and developing the initial product, customizing the product to meet the integration needs of individual customers, and upgrading the product involves engineering labor costs that can reduce profit margins.

In its interviews with ISVs Nucleus found that most had developed the integration functionality in their solutions with in-house resources that used custom-coded development. The decision to choose BizTalk to become the integration component of their solution was driven by three factors: functionality, the accessibility of Microsoft platform to in-house developers, and cost.

The Microsoft .NET framework and development tools provide a higher level of abstraction that speeds development tasks, providing an advantage over custom-coded integration development. This impacts not only initial development time, but can also speed the development of product upgrades, and customized development for customers. The integration of Microsoft Visual Studio.NET with BizTalk Server enables developers with Visual Basic development experience to leverage those skills and shorten the learning curve for building integration applications with BizTalk. This can extend the pool of developers that an ISV can dedicate to integration work. Comments from ISVs include:

- *It eases the development process quite a bit. It's an easy environment to work in and glue together different products and components. Our work focuses on business processes and moving those processes between multiple systems. BizTalk is the central glue that makes it all work.*
- *Using BizTalk frees up development resources and as we can leverage our in-house Microsoft expertise, it provides us with more resources that can be devoted to integration.*

Other advantages ISVs cited was BizTalk's support for open standards, such as SOAP, XML, BPEL, (Business Processing Execution Language), and EDI, which provides them with greater flexibility for delivering integration services that

address a customer's specific environment. The extensive list of BizTalk business application adapters available from Microsoft and its partners eliminates internal development time devoted to custom coding for creating connections for to application data sources.

An ISV that markets its products to the manufacturing industry found that BizTalk would reduce its development time from several months to several days. To quantify the projected savings in the accompanying ROI tool, multiply the number of developers on your team by the average fully loaded hourly rate, and then by the estimated hours saved to determine the potential benefit amount.

Industry-specific accelerators for GDS (Global Data Synchronization), HIPAA (Health Insurance Portability and Accountability Act), RosettaNet, and SWIFT provide a two-fold benefit for ISVs. The BizTalk accelerators deliver tools and updates that not only provide a jumpstart on initial development time, but also take care of compliance to meet the latest standards. One ISV noted:

- *Keeping up with the SWIFT changes is a time-consuming effort. Leveraging the SWIFT accelerator means that we do not have to dedicate resources to do this, and it provides us with a standard process for accelerators.*

The ability to leverage the BizTalk platform to build systems that connect data from a client's multiple disparate data sources and applications provide ISVs with a consistent platform that reduces development time. Rather than building "one-off" customized solutions, BizTalk is used as the base integration technology that can be extended to address the customer's specific requirements. As one ISV put it:

- *BizTalk is to our solution as the heart is to a body. Our business focus is business processes, and we use BizTalk as the orchestration engine. It frees up development time and allows us to focus on other aspects of our platform.*

Key returns from reduced product development time include:

- Decreased development costs
- Reduced/deployed development staff
- Faster time to market
- Improved utilization rates
- Reduced system maintenance costs

Improved product delivery

The interoperability of Microsoft BizTalk Server with multiple back-end systems provides ISVs with a competitive advantage to win business. For some ISVs, being able to easily connect to applications that are commonplace in a particular industry, such as SAP in the manufacturing space, is a checkbox item for doing business. For others, the ability to lower a customer's integration costs, especially in regard to services, provides a leg up on the competition:

- *We were able to close a major deal last year, as we were able to demonstrate interactivity with the customer's environment with BizTalk. We see the flexibility of BizTalk and how it can move with us in the future.*
- *Having an open source platform makes us a player and is a driver for new sales. Customers want to reduce complexity and reduce the amount they pay*

for custom integration fees. It also helps with our relationship with the customer, as they don't fear that every time we walk through the door it's going to end up costing them a lot of money.

- *We regained our investment in BizTalk on our first customer sale. Our competitors were proposing a custom-built solution; we can go in with off the shelf components that reduce the cost to the customer.*

The ability to provide sophisticated business process automation and monitoring also exposes powerful capabilities directly to the end user, which can further enhance or differentiate the ISV's product in the eyes of the customer. The customer can easily interact with key process information in real-time using the familiar Microsoft Office environment and the BizTalk Business Rules Composer. These strategic differentiators can help improve the competitive positioning of the ISV in the marketplace, and influence customer sales.

Many ISVs that Nucleus spoke to had developed and marketed their own integration solutions, but found the addition of BizTalk gave them a repeatable platform and process that could address multiple customer situations. This enabled them to develop customer solutions more quickly, and reduced the time and labor previously devoted to custom code development.

When calculating the benefit of increased profits in the Nucleus ROI modeling tool, partners that will be embedding BizTalk in their solution should remember to include the incremental software margin gained from the discounted runtime license price.

Several ISVs noted that they could now increase the number of internal developers that can work on integration projects. By leveraging their experience with Microsoft .NET technology, developers who did not previously have any integration development experience are able to extend their skill sets with training. While some ISVs did say that the richness of the product does involve a learning curve, most reported that VisualBasic developers were able to make a smooth transition.

Key returns from improved product delivery include:

- Increased customer sales
- Reduced integration costs
- Increased profits

Reduced Cost and Complexity of Integration Projects

Customers view BizTalk Server as an information backbone that serves as a central hub for data delivery. When compared to other integration solutions on the market, BizTalk enables companies to buy the functionality that they need now, and offers the extensibility to add functionality incrementally as the company's needs change. In some industries, such as retail, cost is a major factor in technology purchasing decisions. BizTalk provides an attractive price point, and delivers rich functionality that the business requires. Its graphical tools also provide a level of accessibility that will enable some customers to build business

rules, integrations, and orchestrations on their own, which will reduce their integration services costs.

KEY COST AREAS

Nucleus has identified the following key cost categories that should be considered when an ISV is evaluating the potential return from an investment in Microsoft BizTalk Server. The associated Nucleus financial modeling tool provides further detail and calculations for evaluating the ROI associated with incorporating BizTalk technology into your product offering.

Software

Key software costs associated with Microsoft BizTalk Server will include development and testing license fees for the software as well as any ongoing maintenance fees. If your partner agreement with Microsoft includes royalty fees for embedding BizTalk with your solution, those fees should be included in the ongoing software costs total.

Personnel

Personnel costs associated with the development and deployment of Microsoft BizTalk solutions for your customers should be quantified in the financial modeling tool. This should include all internal development personnel that will be involved with BizTalk development.

Training

Both the cost of training your IT staff to develop and support BizTalk Server and the ongoing training classes, conferences that they will attend to keep current on the platform, should be included in the financial modeling tool.

Other

Costs such as travel and entertainment associated with offsite training, along with any other expenses not captured in the above categories should be included in the "other" section of the financial modeling tool.

CONCLUSION

Microsoft BizTalk Server provides a competitive advantage to ISVs through its open standards-based technology that delivers a repeatable platform for building integration solutions for customers. Employing BizTalk, rather than building custom coded solutions, reduces the expense of development, provides an attractive price point that can increase your profit margin, and delivers your customers with a cost-effective solution for tackling their integration projects.