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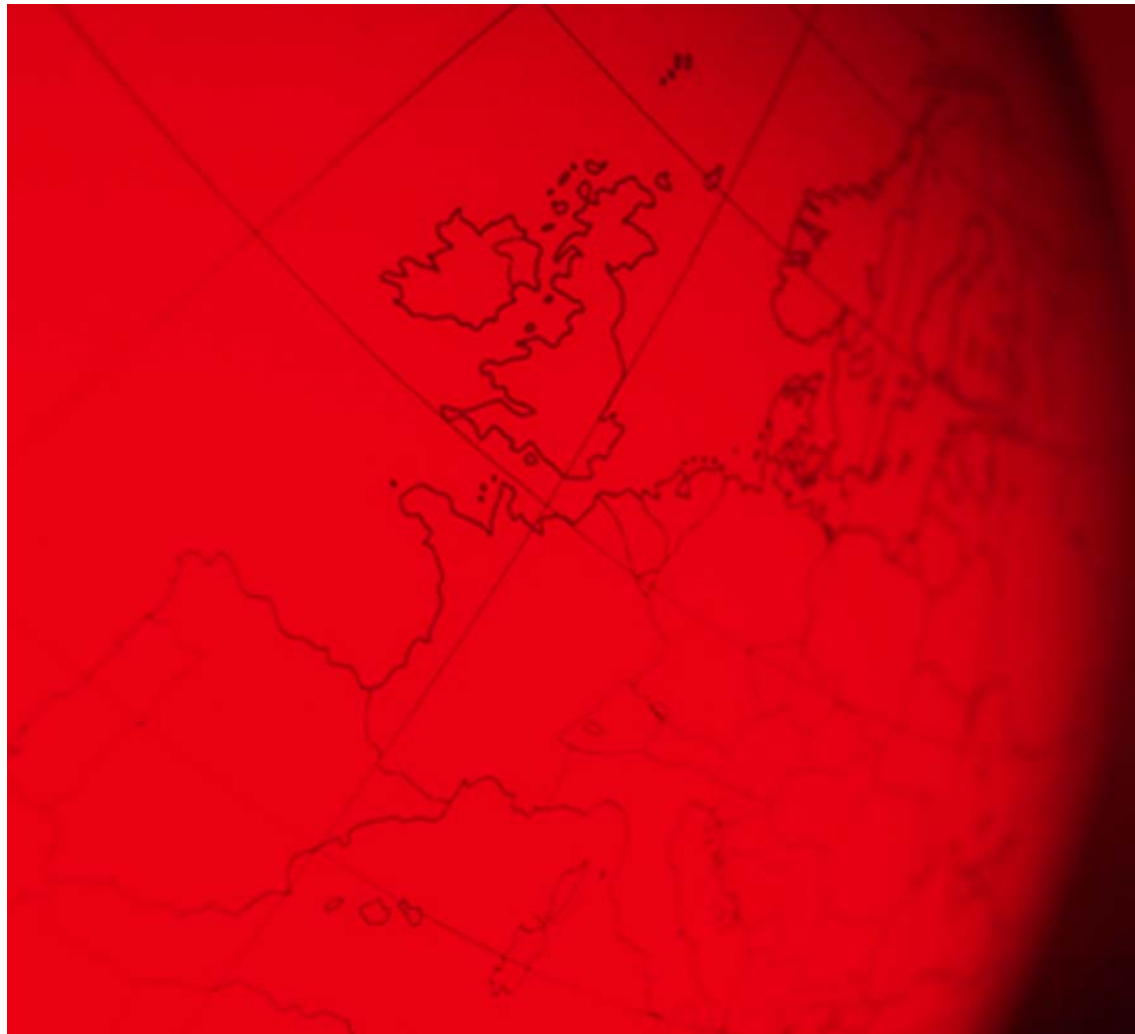
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# **ROI EVALUATION REPORT**

## **COGNOS TECHNOLOGY FOR ISVS**



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**THE BOTTOM LINE**

**Independent Software Vendors (ISVs) that embed or integrate Cognos technology are enabled to win more new business, win back maintenance customers, and gain an edge on competitors by adding significant value to their core product set.**

This report explores the costs and benefits associated with an Independent Software Vendor (ISV) embedding or integrating Cognos technology as part of its commercially developed and marketed solution. To gather data on these costs and benefits, Nucleus conducted in-depth interviews with Cognos ISV (OEM) partners.

Cognos develops and markets corporate performance management (CPM) software. Its products provide companies with an infrastructure and tools to aggregate data from multiple information systems and deliver it to workers in an accessible form that enables them to report and analyze business conditions. Within this framework, companies have the ability to create and track budgets, measure and monitor key business metrics, and build and deliver reports.

The key functionality areas delivered by Cognos technology are business intelligence, planning and budgeting, and financial consolidation and reporting.

**Business intelligence**

Cognos 8 Business Intelligence includes tools for analysis, query and reporting, scorecarding and dashboarding, event management, and data integration. All product functionality is contained within a single Web-based application. The user interface has a task-based structure so, for example, to build a report the user selects that function from the top of the Web page to access all report creation menu items.

The Cognos 8 architecture has a common metadata layer that includes relational data sources, dimensional data sources, and modern data sources such as XML and Web services. The metadata is stored in a central repository and shared by all components within the Cognos 8 application. Information in the metadata repository is presented in business terms rather than technical language so the user can logically select data areas to build reports or select criteria for analysis. Client deployment of Cognos 8 can be delivered through Web browsers, the Cognos Connection portal, or third-party enterprise portals such as IBM WebSphere, SAP, and BEA Plumtree.

**Planning and budgeting**

Cognos Planning contains tools for business planning, budgeting, and forecasting. The product is designed for use by finance and business managers, and includes collaborative features that enable multiple departments to work together in the planning process. Modeling tools enable plans to be built encompassing both financial and operational data. The Web-based plans can be shared with multiple departments, making it possible to involve a wider set of stakeholders in the process.

Data can be incorporated into the plan from ERP and general ledger systems. Users can choose between a browser or a Microsoft Excel user interface to enter

and manipulate data. Workflow features enable management and monitoring of plan status down to the participant level to provide the details of exactly where things stand in the process. Analytical tools provide the capability to change plan assumptions and view the implications across multiple dimensions of your operations. Integration with Cognos BI tools enables plan data to be shared and viewed in reports, scorecards, or dashboards.

### **Financial consolidation and reporting**

Cognos Controller provides an automated system for aggregating and reporting financial information. The system provides centralized consolidation of financial information and can directly integrate data from ERP systems, general ledger software, and other transactional systems. Links can also be created between data cells in the Controller application and supporting detail in the form of documents, Web pages, Excel spreadsheets, or email to provide additional context to data entries. Users access the system through a Web front end, or use an embedded Excel interface to enter or manipulate data.

The system stores information in a central database and can be scaled to support a wide number of users. It includes a security and authorization model to control access to information. Corporate governance support is included for International Financial Reporting Standards (IFRS), Financial Accounting Standards Board (FASB), Basel II, the Sarbanes-Oxley Act, and Generally Accepted Accounting Principles (GAAP). Integration with Cognos 8 enables financial data to be exported and presented in reports. Data can also be exported to Cognos Planning to provide a view into the results of planned versus actual numbers.

### **Product architecture**

Cognos 8 has a service-oriented architecture (SOA). This enables ISV partners to use Web services standards to incorporate the technology into their applications. Another advantage of the product architecture is that all Cognos 8 functionality is contained within the same application. This can reduce development complexity for a partner who wants to incorporate several aspects of the feature set into their product.

The product architecture consists of three tiers: presentation, application, and data:

- The presentation tier is a browser-based client that the user can access through a Web browser or as an embedded component within the user interface framework of the partner's application. Deployment does not require downloading or maintaining applets or plug-ins.
- The application tier contains and manages all the business intelligence services and runs on Windows, UNIX, or Linux systems.
- The data tier contains data sources and the common metadata model. The metadata model categorizes data elements and connects with relational, multidimensional, and Web data sources, as well as ERP and other transactional systems.

Connections between the tiers can be established using industry standard protocols, such as XML, SOAP, and WSDL. This provides ISVs, and ultimately their customer base, with a number of options for connecting Cognos technology with

existing systems. The standards-based architecture also affords the flexibility to add new components to the system, such as connection to new data sources, in the future.

Cognos can leverage existing security models, both commercial and custom, for user authentication and encryption. This eliminates the need for replication or duplication of security administration and provides partners with the ability to incorporate Cognos technology into an established single sign-on model.

ISV partners can employ a Web services-based application programming interface (API) that is exposed through the Cognos 8 software development kit (SDK). The API includes hooks into multiple aspects of Cognos technology so, for example, a partner can change user interface elements to mirror the behavior of its core application. Developers also have the ability to customize, include, or hide Cognos product functionality.

Onyx Software embeds Cognos technology to drive the analytic component of its customer management solution. Onyx Analytics provides users with pre-built reports, OLAP cubes, and templates for accessing and delivering customer data in the form of reports and interactive dashboards. In developing the integration, Onyx modified the Cognos user interface, implemented a single sign-on, and created custom reports to include with the product. The reports are geared to specific audiences, such as sales, marketing, and customer service, to jumpstart the adoption of analytical tools. Users also have the ability to take advantage of the full breadth of Cognos BI technology to build their own reports.

### **Development environment**

Cognos has a Web services-based API that provides ISVs with access to the product at several different levels, including the user interface, report, portal and data levels. The services communicate with one another using common messaging protocols that leverage open Web standards such as SOAP, XML, and WSDL.

Given the architectural structure of Cognos 8, the entire product can be exposed as a Web service. Cognos technology can be integrated into Java applications or incorporated within the Microsoft .NET framework. This provides developers with the ability to use their development tool of choice during the product integration process. Cognos software runs on Windows, UNIX, and Linux systems, and provides an open data strategy allowing connectivity to any data source including databases such as Oracle, Microsoft SQL Server, IBM DB2 UDC, and Sybase; ODBC and JDBC-compliant databases, and modern data sources such as XML, Java, or Web service interfaces.

Several elements of the product can be customized to fit an ISV's requirements for the look and feel of the user interface, or to adhere to established branding standards. In fact, one ISV noted that with the spectrum of options available for product modification, it makes sense to take the time upfront and determine what changes you really need to make to meet your business requirements. For example, although it's possible to completely rewrite the Cognos user interface, this partner determined that it was not a task it really needed to tackle, and

instead focused on branding modifications which were more important in achieving its objectives.

Cognos provides tools for building metadata models that are used to define the different data types that will be employed by the system, and the business rules governing their use. For some ISV partners, this was the most challenging aspect of the development process. The challenge lies in mapping out all the possible relationship between the data types and determining the universe of metrics, or measurement areas that customers will want to view. Once completed, the metadata model is shared across all Cognos products, which provides businesses with a single repository to enforce consistency of information.

### **Cognos ISV (OEM) partner program**

The Cognos ISV (OEM) partner program includes technical, marketing, and sales resources. Partners are given a central contact to manage the relationship and provide access to additional contacts within Cognos. A technical account manager works with the ISV partner to plan and implement the product integration and serve as an ongoing resource for technical guidance.

Key elements of the Cognos ISV partner program include:

- Consulting. Partners have the choice of several services packages that provide assistance based on the focus of the development project. A quickstart service includes onsite assistance and knowledge transfer to get the initial development project off the ground successfully. Custom integration services for embedded projects assists the partner with incorporating Cognos functionality within the ISV application. Installation services focus on configuration and deployment procedures. Training services assist with designing curriculum for a partner's internal staff or the development of end user training.
- Training. Cognos offers training programs geared to both technical and sales audiences. Product training is delivered in several settings, including classroom, online, or at the partner site. Sales and pre-sales staff can attend a sales boot camp that Cognos hosts at its headquarters each quarter, or can take advantage of sales training Webinars.
- Marketing. Cognos provides joint marketing support including participating in press releases for product announcements, user conference and trade show support, and partner-ready versions of collateral such as white papers, datasheets, and success stories.
- Sales. Partners can engage Cognos staff to assist with demos and sales presentations at prospect sites.

Partners have access to a secure Web site called PartnerNetwork, which contains product information, sales and marketing materials, and technical resources such as implementation guides and knowledge bases. Cognos also hosts an annual partner summit to provide updates on product and program information.

## KEY BENEFIT AREAS

Nucleus identified three key benefit areas for software vendors that embed or integrate Cognos technology: reduced development time and costs, improved product delivery, and increased profits from incremental revenue.

### Reduced development time and costs

Software vendors that Nucleus interviewed had different strategies for delivering BI functionality prior to establishing a relationship with Cognos, including:

- Internally-developed or “homegrown” business intelligence capabilities. Companies had developed functionality to enable customers to extract data contained within their core application for reporting and analysis. Faced with the need to expand the breadth of BI functionality to deliver more features to customers, the companies had to make the decision between putting more development resources behind the effort, or turning to an ISV relationship.
- Reselling multiple BI products. Companies that grew from acquisition had an amalgam of BI technology to support. This resulted in overhead expenses to manage the relationships with all the BI vendors, devote product management resources to orchestrate product integration, and maintain support staff to deliver front line support for customers.

Embedding or integrating Cognos technology enabled these companies to improve the depth of reporting, analysis, and planning functionality they could deliver to their customers, without incurring a significant ramp-up in development costs, as a number of partners noted:

- *We wanted to be focused on our core application and do not want to be in the business of building technology that’s already available.*
- *We wanted to expand the reporting capabilities in our ERP product to provide our customers with greater latitude.*
- *We wanted to work with one vendor and provide our customers with a standard technology for corporate performance management.*

Scalability, architecture, and the ease of doing business with Cognos were key reasons why companies selected Cognos instead of other competing BI solutions:

- *We selected Cognos due to the breadth of its technology and completeness of solution. In addition, we’ve found that they have been easy to work with.*
- *The main reason was that Cognos clearly had a more advanced architecture. For an ISV vendor, that made a lot of sense for us. We focus on huge enterprises and needed something that was scalable to the highest degree.*

Customer demand for reporting and planning solutions is strong, and some ISV partners build upon the baseline Cognos technology to develop industry or business-specific extensions that add strategic value to their core product.

The Web-based architecture of Cognos allows partner development teams to leverage existing skills and development tools in building product integration. Although most of the partners Nucleus interviewed dedicated developers to the initial development and ongoing upkeep of the Cognos integration, they found that by using Cognos they could spend less developer time on basic analytical functionality and more time adding value to their solution.

Workbrain, a workforce management solution provider, embeds Cognos technology in its Workbrain Intelligence product. The product ships with pre-built dashboards, reports, and analytics that deliver views of key performance indicators (KPIs) that gives customers embedded business intelligence best practices for industries such as retail, healthcare, and manufacturing, and are tailored to specific managerial roles within those organizations. In addition, Workbrain used Cognos to pre-build a metadata model for each industry solution that allows non-technical users to author queries and create ad-hoc reports without needing to understand the complexities of the underlying data model. The inclusion of Cognos technology has provided a competitive advantage as Workbrain delivers a tightly integrated, industry best practices-focused solution that customers can implement out of the box.

### Improved product delivery

Software development time can have both short-term and long-term implications on a software company's revenue: delays in product releases can impact revenue from a particular release, while delays in integrating new features can drive prospects to consider more innovative competitors.

Cognos's SOA architecture reduces the complexity of the development process and makes integration between multiple Cognos products, such as PowerPlay and ReportNet, faster and easier. The unified framework:

- Reduces the development effort as developers work with one product rather than multiple products.
- Enables software vendors to expand their offerings from, for example, an initial deployment of reporting and query functionality to a larger CPM solution that provides customers with integrated planning, budgeting, and financial consolidation.
- Provides greater options for information delivery with integrated dashboard and scorecard functionality that can be customized depending upon the business need and the role of the user.

Partners found the end result was the ability to go to market faster and provide more innovative functionality to their customers:

- *It would have taken us at least twice as long to get to market if we developed the analytical piece in-house, and it still probably would have had half the functionality that Cognos delivers.*
- *In the future, we are planning to provide pre-built performance management solutions to provide our clients with more value. This will include customized industry-specific technology and services. Customers understand the importance of corporate performance management, but they need guidance to implement it in their business.*

SSA Global is a leading provider of extended ERP solutions for manufacturing, distribution, retail, services and public organizations worldwide. Through acquisitions the company inherited a variety of BI technology. Managing the multiple ISV relationships and product versions led the company to seek out a standard technology for corporate performance management. Cognos was selected due to the breadth of its technology and the completeness of its solution. SSA Global has been selling Cognos CPM products as an add-on component for its customers, but with the advent of the Cognos 8 architecture SSA Global will be able to leverage its own SOA architecture to embed the Cognos toolset. Having a central framework for all CPM functionality will streamline the development process, as SSA Global developers will gain efficiencies from working with a unified code base.

On the deployment side, Cognos employs a Web-based client that can be accessed via a browser or deployed within a corporate portal. This provides flexibility in the deployment process of embedded technology as well as the ability to scale the implementation to large-scale user populations.

#### **Increased profits from incremental revenue**

All the partners Nucleus interviewed cited competitive advantages from integrating Cognos that have enabled them to increase sales to existing customers, provide new revenue streams through extended functionality, and increase their average deal size.

#### **Increasing sales from existing customers**

With the ability to offer both new business intelligence functionality and capabilities and new CPM functionality to customers, partners can leverage Cognos technology to offer more value to existing customers, and increase sales by either selling functionality, additional licenses, or in some cases winning back maintenance licenses that customers had stopped paying:

- *Cognos technology enhances our overall offering when selling to prospects. Customers like the single source aspect and look to us as the trusted vendor. In the ERP space, we have clients who like the fact that we have planning capabilities.*
- *We've had situations where customers would stop paying maintenance because they didn't see any gain. The CPM products helped us win back maintenance business because customers saw the value of the technology.*
- *More and more we see that having CPM products helps us win deals. There are some deals that we would not have been a part of if we didn't have it.*



Deltek, a provider of enterprise software solutions for project-based businesses and professional services firms, has been a Cognos partner for more than 13 years. The company first turned to Cognos to provide its customers with expanded reporting capabilities. Since that time the relationship has extended to include planning, budgeting, and scorecarding technology that Deltek incorporates into its business performance management (BPM) solutions. The BPM products include pre-built reports, cubes, and planning models that Deltek has customized with industry-specific expertise. Deltek has developed a large practice area around the BPM technology, which includes consulting services and development resources, devoted to building deeper levels of customization and guidance for customers to implement performance management in their organization.

#### Developing new revenue streams

As CPM is relatively early in its adoption phase, there are opportunities to tailor the technology to meet vertical industry requirements, and deliver services to help customers implement CPM in their environment. Cognos partners are taking advantage of this market need by building specialized CPM offerings for vertical markets, delivering integrated analytical capabilities from within their core applications, and including pre-built reports and dashboards that are tailored to their core applications:

- *In contrast with our main competitor, we have a completely integrated, best-of-breed solution. It's also incenting customers that didn't see a compelling reason to upgrade to the latest version of our product to move ahead and upgrade.*
- *Cognos technology has become a key component driving new deals.*
- *It enhances our overall offering when selling to new prospects.*
- *We plan to increase our investment in Cognos technology to develop customized performance management solutions that will add more value to our clients through industry-specific technology and services.*

Infor is an enterprise application software provider that focuses on select verticals in the manufacturing and distribution industries. As its product line has grown through several acquisitions, the company is in the process of standardizing on Cognos to serve as the business intelligence platform for all its ERP products. This consolidation will enable Infor to gain economies of scale as it can leverage engineering, support and training resources across multiple product lines. In addition to incorporating Cognos technology for reporting and OLAP, Infor also markets Cognos performance applications that provide pre-built reports and metrics such as key performance indicators (KPIs) to deliver analytical insight on customer, financial, and supply chain data drawn from Infor's ERP system.

#### Increasing average deal size

One ISV reported that the average sales uplift gained with Cognos technology ranged from 25 to 30 percent. Another ISV estimated the average uplift to be \$125,000. In many cases, the initial sale leads to additional incremental revenue as a customer may start by purchasing reporting capabilities and then supplement that in the future with additional functionality such as scorecarding or planning and budgeting.

## **KEY COST AREAS**

Nucleus has identified the following key cost categories that should be considered when a software vendor is evaluating the potential return from an investment in Cognos technology. The associated Nucleus financial modeling tool provides further detail and calculations for ISVs to evaluate the ROI associated with incorporating Cognos technology into their product offering.

### **Software**

Key software costs associated with Cognos include royalty or annual fees for embedding or integrating Cognos with an ISV's solution. Cognos takes a flexible approach with its ISV pricing strategy and strives to align its licensing model to complement that of its partners. After meeting with the partner to gain an understanding of the partner's pricing model, business goals, and value drivers, Cognos then aligns that to map to an appropriate pricing structure which can include an annual fee, royalty fee, or other similar payment.

### **Hardware**

The purchase of additional hardware may be necessary for testing, staging, and supporting customer installations of applications that incorporate Cognos technology. Any hardware costs directly related to Cognos should be added in the cost section of the financial modeling tool. If the hardware is not exclusively used for Cognos development or support, then the cost should be allotted based on the percentage of use devoted to Cognos.

### **Personnel**

Personnel costs associated with incorporating Cognos technology into an ISV's product line include development staff involved in the initial product integration, staff required to maintain the integration on an ongoing basis, and staff responsible for handling technical support inquiries for customers. In addition, ISV partners also devote resources to productization activities, ongoing product management and maintenance, as well as sales support.

The value of staff time should be quantified in the financial modeling tool based on the annual fully loaded salary of the employee.

### **Consulting**

Cognos offers a number of different consulting options to ISV partners. Services offerings include options for onsite assistance with integration, installation and configuration, product re-branding, security design, reporting design and customization, and specialized training. Costs for initial and ongoing consulting services from Cognos can be entered in the financial modeling tool.

### **Training**

ISV partners invest in training time for sales and technical people. Most training classes are free of charge, but partners can take advantage of additional courses if necessary. One partner cautioned that training needs should be examined upfront to make sure that the expense is justified and provides a good return. This partner spent time and money training some staff members on Cognos technology who never put that training into practice. In hindsight, this partner would have put that money into hiring Cognos consultants for a better return.

Both the initial cost of training your staff on Cognos technology, and ongoing training classes and conferences that they will attend to keep current on the platform, should be quantified in the financial modeling tool.

### **CONCLUSION**

Cognos technology provides Independent Software Vendors (ISVs) with technology that adds significant value to their core product set. Its SOA architecture enables ISVs to use Web services standards to incorporate the technology in their applications, and a SDK provides ISVs with programmatic access to multiple layers of the technology to facilitate extensive customization. This provides ISVs with a wealth of options to match the look and feel of its application and also to accommodate the particular data consolidation and presentation needs of its customer base.

While the scale of benefits differs depending upon the scale of an ISV's product integration implementation, all Cognos partners that Nucleus interviewed reported that the technology had a positive impact on their business.