In Support of (Business) Intelligence

A Technical Solution Paper from Saama Technologies, Inc.

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Business Intelligence – A Growing Need

Business Intelligence is one of the fastest growing segments in the enterprise software industry. The market for business intelligence, analytics and corporate performance management grew by 13.4% in 2010 to $10.5 billion, according to Gartner. The increasing reliance on data for making business decisions is likely to sustain a steady growth rate for business intelligence solutions in the future.

The dominant solution is SAP Business Objects with 22.9% market share.   In April 2011, SAP AG released a new 4.0 version of its BI (Business Intelligence) and EIM (Enterprise Information Management) solutions. This new version is driving a massive upgrade cycle across the industry. This next wave of innovation creates a conundrum for BI managers and executives -- how to fund the SAP Business Objects upgrades and at the same time keeping the overall budget flat while improving service delivery.

Cost reduction AND improved service delivery are the primary catalysts for a Business Intelligence Center of Excellence (BI CoE).Business Intelligence CoE's show that the structure can deliver impressive results in cost, quality, productivity, customer service and other key business metrics. This is a model that has proven its value in numerous aspects of Business Intelligence strategy and implementation. Leading edge companies are now applying the BI CoE concept to support and enhancement for business users.

In many corporate environments, the SAP Business Objects Support and Enhancement task is typically managed by highly skilled developers (often a mix of in-sourced or outsourced development teams) whose services are needed in other critical high priority areas like upgrades. Increasingly, best practice firms are moving to create a lower cost BI Center of Excellence structure to support BI users across the enterprise and free up highly skilled developer and architect talent.

Depending on the company, a mix of cost, quality, productivity, expertise and speed of BI user support are the core drivers for a Business Intelligence CoE.

Business Intelligence CoE: The Big Picture

To understand the unique value of a BI COE, it helps to take a step back and consider the big picture.

At its core, a CoE is a cross-functional team with specific roles, responsibilities, and processes, all designed and implemented to sustain service delivery and promote the effective use of Business Intelligence across the enterprise. A CoE builds on a 'best practice' shared services model specifically to support and enhance the adoption of complex, cross-functional and multi-disciplinary applications such as SAP Business Objects. Some high performance firms also leverage the CoE structure to facilitate mergers and acquisitions.

A BI CoE for support features high-level skillsets such as those around SAP Business Objects and enables companies to free up resources that would offer greater benefits elsewhere. Companies still get the focused technology specialization they need as well as the benefits of scale, process and automation tools that they can't get from an in-house team. This is an area that has been largely under the radar. However, in this economic environment, with the cost reduction and productivity boost it enables, it deserves to become a priority.
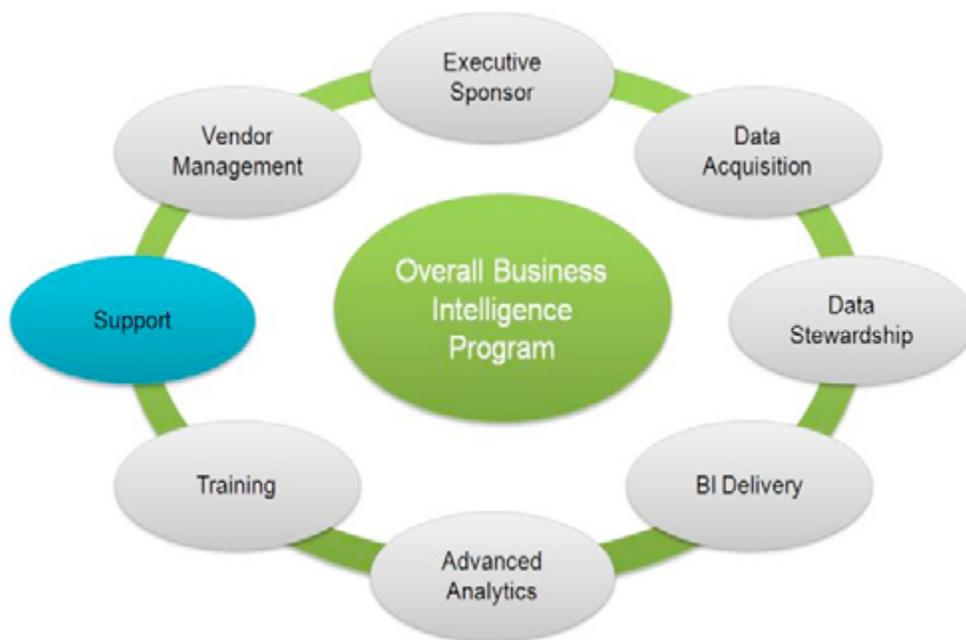
Business Intelligence CoE

BI CoE - In Search of High Performance

No practice or technology should be implemented without a clear view of how it improves performance. Let's look at some ways BI CoE can improve service delivery.

Recent research indicates that CIOs are increasingly concerned about the performance, capacity and scalability of their BI implementations. They have the technology and policies in place, and they pay attention to enforcement. However, the real effect on end-user productivity, as well as solid decision making, is another question altogether. Optimal tuning of SAP BOBJ implementations requires deep technical skills and experience, and it won't happen without high-quality support.

By its nature, a CoE enables resources to be pooled across multiple business functions—a critical factor for BI systems that are highly integrated. Given the nature of these solutions, support seems like an unlikely area for a CoE imitative, but it's critical to understand how this affects productivity. Companies typically spend millions of dollars on BI implementations that involve specialized systems, complex software and other tools run by high-end resources with high-value skills.
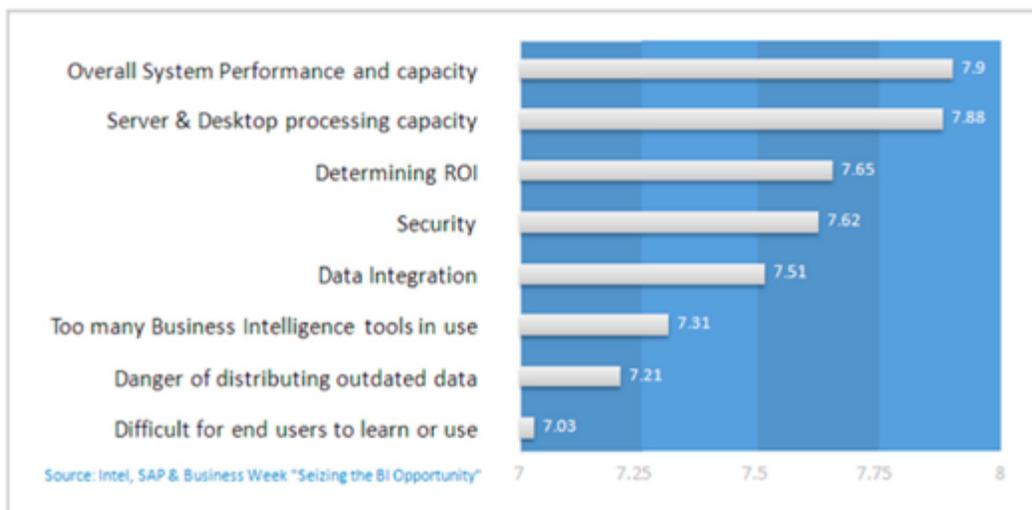
At any given time, there may be hundreds of users counting on a particular BI solution, but only a handful with true mastery of the technology. These few, of course, are frequently called on to help others who are inclined to ask, while many eventually abandon the platform. Having a support team at the BI CoE available to answer questions on an ongoing basis, by contrast, instantly increases not only the utility of this valuable resource but also the productivity of the entire team.

Researchers strongly emphasize this point. "Companies resisting the need to consolidate BI tools……will incur 50 percent more cost for each redundant tool," Gartner reports. The firm also notes that the strategic use of BI "can pay handsome dividends to enterprises that exploit it properly."

And it's not just about a help desk. A good CoE is developed with shared expertise in both business processes and the software required to manage those processes. These best practices and processes can in turn be leveraged for long-term support, continuous evolution and ongoing enhancement of new processes and systems. In technology terms, these best practices and functions run the gamut from technical architecture and operations through software deployment to application development and enhancement.

Bottom line: Optimizing existing implementations such as those around SAP Business Objects, through efficient support and enhancement, is no longer a desire but a critical business need.

Performance Anxiety: Business Drivers for a BI COE

Overall System Performance and capacity	7.9
Server & Desktop processing capacity	7.88
Determining ROI	7.65
Security	7.62
Data Integration	7.51
Too many Business Intelligence tools in use	7.31
Danger of distributing outdated data	7.21
Difficult for end users to learn or use	7.03

Source: Intel, SAP & Business Week "Seizing the BI Opportunity"

A survey of 353 top C-level officers in large companies, reported that the chief BI concern was the performance of BI solutions. Support and enhancement of a BI implementation has a direct impact on system performance which can be managed by a BI COE.

A key driver for an optimal BI CoE operation is ongoing, 24/7 run support for the entire BI operation, augmented with a level of automation that can bring next-level efficiency in system management. This is not an area that traditionally draws high-level attention or is featured in a dedicated CoE initiative, yet in the right circumstances it offers unique value.

Here are a few examples of tasks performed by a typical BI COE for support and enhancement.

Production Support: Data Fixes, Ongoing Support, Scheduling, Monitoring and Admin Activities

Maintenance: Planned Recycling Refresh and Synchronizing environments

Enhancements: Modification of existing reporting system

A typical Business Objects implementation may get a few thousand production support requests in a year and more than a few hundred enhancement requests depending on the complexity and maturity of the environment. Responses to these requests can take anywhere from a few hours for production support to a week for an enhancement request. The efficacy of managing these requests can be measured by service metrics related to the performance of a BI implementation.

Structuring a BI COE for Support and Enhancement

Like every other business undertaking, a well-managed BI CoE initiative designed to support and enhance an existing SAP Business Objects implementation will be a multi-tiered operation. Level 1 is established and unambiguous: The designated team typically oversees the high-level management and running of all BI applications, including the resolution processes.

At the second level, a combination of experience and skillsets, along with considerable offshore resources, begins to offer significant value. This is, in fact, a key support layer: the team is responsible for Key Support layer analyzing and resolving technical issues, software migration, ongoing maintenance, root cause analysis, vendor communications, business communications, relationship management and reporting, monitoring and even best practices.

Finally, there's a third level that takes on even more specific responsibilities. Given the situation, this unit might be tasked with managing issues that arise through vendor escalation, business scalability, long-term software development and bug fixes, infrastructure architecture, and monitoring and control. Of course, the team also augments the team in place and serves as a final line of defense.

Here's how a BI CoE initiative dedicated to support and enhancement might play out in an environment that involves standard BI sustenance and support, while making use of the right skills, best practices and processes, and a high level of automation.

First and most obviously, there's the technical help desk. Every company wishes it didn't need one, but every company does need one. It's largely a back-burner issue to most organizations but critical nonetheless. With a dedicated BI CoE, this function receives the attention it deserves, and the team provides first-level assistance, while engaging the second- and third-level teams as needed for in- depth user support.

Next, there's monitoring and alerting support. The reporting environment is monitored 16/6 or 24/7 (depending on factors such as the industry it's in). The availability of the web portal is also monitored by automated scripts every 15 minutes to verify uptime and general functionality. Specific services (scheduling, QAAWS, publishing, etc.) are also monitored to ensure that all services are functioning as planned.

Finally, there's server support for the data center. This function is primarily built around facilitating hardware support, and includes critical service monitoring, low drive space warnings, patches to the operating system and server backup. Keeping technical documentation up to date is key, and this function maintains that priority.

The technical specialization required in any SAP BOBJ implementation is considerable, and that in turn gives rise to the question of resource allocation. Specifically, the manpower and technical knowledge used during the development phase may not be suitable for broad-scale implementation; in fact, these individuals' skills can stagnate in this function. Optimal use of a BI CoE, meanwhile, can free up these resources to dedicate to other BI projects that have a more strategic imperative.

In fact, industry insiders say that having development and administrations teams from the same vendor can lead to lapses in gatekeeping, while separating the two units can lead to greater innovation (and lower support costs). Similarly, in many enterprises, the ERP support team is frequently expected to support BI. The two functions, however, require very different skills.

A good BI CoE offers a strong combination of troubleshooting skills, knowledge of new industry trend, new developments in the BOBJ environment, active participation in user group meetings, solid grounding in the development function, and architectural expertise. Moreover, through good use of best practices, organizations can rapidly identify the most efficient ways to complete certain tasks, and then make modifications to customize each practice.

Best practices and processes
Some functions require strong process adherence, including:

- User privilege management
- Life Cycle Management, including

Activities of a typical BICoE

- 2000 tickets for production support
- 12 release cycles
- 250 enhancement requests

versioning and auditing for reports and universes
- Documentation
- Scheduling services utilization (best practices)
- Universe and Report design (best practices)
- Creation and support through power users.

Automation

Another significant benefit from the adoption of a BI CoE model for support and enhancement is the identification of numerous functions that can potentially be automated. Just as SAP BOBJ has evolved from a tool to a platform, with a robust set of APIs to communicate to the underlying engine, the engine in turn can be used to many time-consuming manual tasks, such as:

- Migration and version control
- Granular level of audit log (sub-object level to know exactly what was changed)
- Bulk updates of help text
- Bulk change of Universe name for hundreds of reports
- Parallel Universe development
- Report Impact analysis for a given change to schema or Universe

For the record, this is not just about reducing the time and effort required—with good automation, there's a spike in quality too.
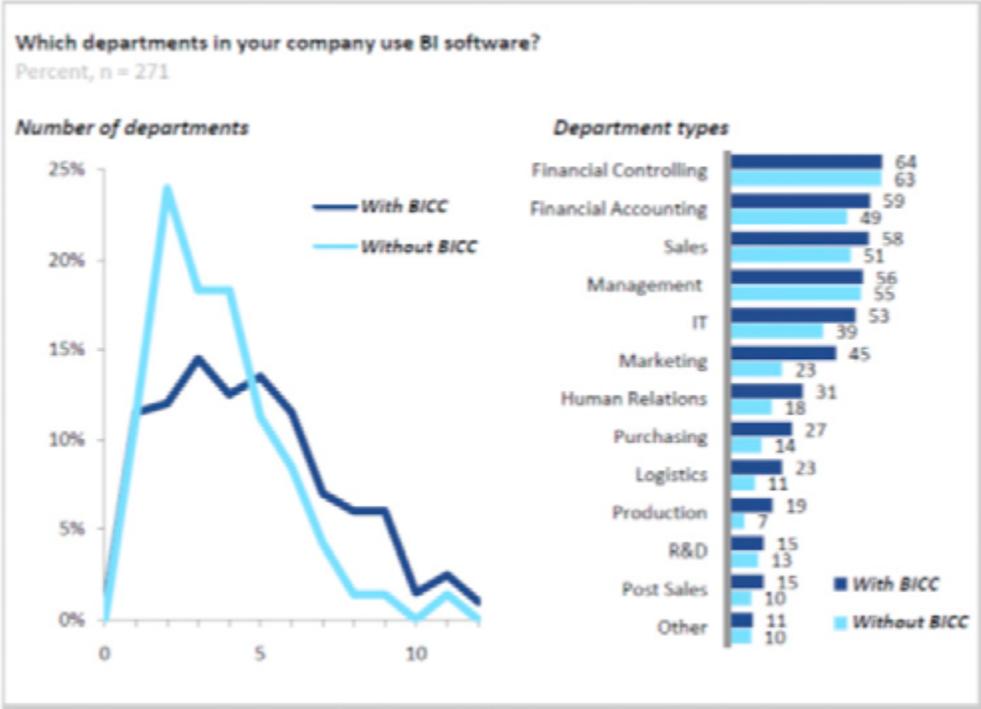
Bottom Line

It is not uncommon for companies with about 1000 users and 20 functional departments to spend in excess of a $1M in support and enhancement of a BI implementation. Some of these can be hidden costs such as opportunity costs of specialized resources which are not directly measured. Implementing a BI COE with efficient processes can result in savings of up to 50% while improving the performance of the BI implementation. Companies have seen these results within 6 months of adopting a BI COE model.

So what's the payoff with a BI CoE dedicated to support and enhancement? In a nutshell, it's a more specific version of the success we already see with a Center of Excellence dedicated to Business Intelligence—and that success is undeniable.

The CoE Advantage: BI Adoption Across the Enterprise

A recent report from BARC (Business Application Research Center), Organization of Business Intelligence, offers a before-and-after comparison with a broad-based BI CoE initiative; the 'after' scenario involved much quantifiably greater adoption. Executives contemplating the landscape after a major Business Objects implementation will appreciate the difference.

Which departments in your company use BI software?
Percent, n = 271

Number of departments

With BICC
Without BICC

25%
20%
15%
10%
5%
0%

0   5   10

Department types

Department	With BICC	Without BICC
Financial Controlling	64	63
Financial Accounting	59	49
Sales	58	51
Management	56	55
IT	53	39
Marketing	45	23
Human Relations	31	18
Purchasing	27	14
Logistics	23	11
Production	19	7
R&D	15	13
Post Sales	15	10
Other	11	10

■ With BICC
■ Without BICC

Broader adoption in turn leads to greater cooperation. This starts out as an IT-related issue, but it inevitably becomes more about business processes. The BARC report provides a clear window into the always-evolving relationship between IT and the rest of the company: In every case, with a well- developed BI CoE model, there's a marked improvement. In some cases, such as those having to do with advice provided to business users, the difference is dramatic.

And finally, it's important to look to the future. It's a highly unstable, even volatile, business environment worldwide, and it looks like to stay that way for a while. There are clearly growth opportunities out there, but capitalizing on them will require a fast turnaround and virtually seamless scalability. Most of all, given the current economics, it will require optimizing the existing implementation. This is just one of the benefits offered by a BI CoE dedicated to support and enhancement.

Bottom line

The fundamental goal of a Business Intelligence implementation is to manage the enterprise data lifecycle in such a way as to transform complex data streams into valuable information that directly impacts business decisions. Corporations have allocated considerable resources to every SAP Business Objects implementation, and the pressure is on to get their money's worth. A Business Intelligence Center of Excellence—a distinct entity focused specifically on support and enhancement within the existing infrastructure—changes the economics of the entire arrangement while enhancing the quality of the services offered.

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