



Five Essential Guidelines for Choosing a Business Intelligence Vendor

Introduction

Implementing a Business Intelligence (BI) solution leads to dramatic operational improvements and benefits that far outweigh the investments in time, money, and personnel necessary to select, deploy, and maintain such an application. Unfortunately, far too many BI deployments fail to reach their anticipated potential, and prove to be a disappointment to both management and users. In this paper, we depict a series of the most common BI obstacles, and illustrate how to avoid many of these pitfalls. It is important to apply a well-defined evaluation methodology in order to make sense of the diverse and complex BI software marketplace.

To give you a head start on creating evaluation guidelines of your own, we offer a series of best practices that you can easily apply when selecting a BI solution for your organization. The intended audience for this paper is anyone tasked with evaluating BI solutions, such as business analysts and information technology professionals.

Why So Many BI Projects Fail

An unhappy confluence of circumstances conspires to derail far too many BI implementations. Let's look at each major category of impediment.

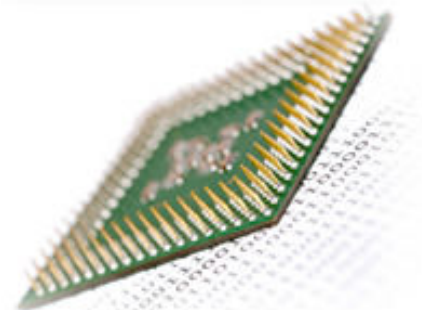
A confusing product landscape

Many suppliers claim to support this marketplace, with prospective clients ranging from small/medium businesses to the largest global enterprises. Naturally, each vendor has its own distinct vision about what should be present in a BI solution: some lean more heavily towards reporting, while others are more focused on analytics. They offer vastly different deployment models, ranging from traditional on-premises software installations to purely vendor-hosted software as a service (SaaS). There are even hybrid models, with some information hosted at the customer's location and others hosted in the cloud.

Widely divergent technology and cost models

The technological underpinnings of these packages also vary tremendously: some offerings provide all needed components, while others require the purchaser to cobble together a bewildering array of supporting hardware, software, and other infrastructure as a starting point for the BI initiative.

With all of this complexity, it's not surprising that many consultancies have latched on to BI projects as a reliable source of income. Finally, the buyer's headaches continue when it comes to making sense of vendor pricing models, which enormously complicate the job of estimating a return on investment for the substantial BI outlays. Given all of these circumstances, it's no wonder that many evaluators of BI initiatives feel overwhelmed, and that these undertakings are in trouble before they even start.



Deployment complications

Even in those scenarios where the evaluation and acquisition of the BI technology have concluded smoothly, the actual implementation often starts with great expectations, but quickly runs into unfortunate realities. To begin, many deployments quickly overrun their initial (often optimistic) schedule. Instead of quickly delivering a working solution to

the user, costly external consultants must expend significant effort laboring to integrate all of the underlying technology necessary to support the BI package.



Aside from annoying the user community, an excessively long BI deployment is at great risk of being condemned to irrelevance by the natural, never-ending cycles of business change. Since speed is of the essence, the entire investment may have to be written off if too much time elapses between the BI package selection and its final implementation.

Operational limitations

In those situations where both the evaluation and implementation have proceeded smoothly, few organizations are able to escape the inherent limitations found in BI software packages. For enterprise-grade solutions which commonly require very lengthy deployments users often complain of bloated feature sets, static reports and queries, and built-in IT when it's time to modify or expand the inventory of queries and reports. On the other hand, point solutions regularly suffer from considerable amounts of missing functionality. Although lighter-weight solutions claim to bypass the IT organization in exchange for faster deployment, this communication gap makes it difficult, if not impossible, to gain access to vital information. This chasm greatly constrains the value of the BI solution.

In summary, each of these drawbacks has contributed to the perception that BI initiatives are risky; considered as a group they've persuaded many enterprises to postpone or even cancel a BI project:

- Numerous vendors, each with a unique viewpoint
- Widely divergent solution capabilities
- Bloated enterprise-class packages
- Incomplete point solutions
- Differing deployment models: onsite, cloud-based, hybrid
- Complex mixture of required supporting technologies
- Consulting-intensive installations
- Lengthy deployments

This is unfortunate, because when properly implemented, BI is of enormous utility to any organization. To combat these detriments, BI solution evaluators must take the initiative and follow a logical, well-defined set of guidelines and best practices when making this important decision. We'll focus on these important suggestions for the remainder of this paper.

Five Essential Guidelines for Evaluating BI Software

Now that we've itemized some of the negative events that can occur when selecting and deploying a BI solution, let's look at a few simple recommendations you can employ when evaluating BI solutions.

Is the package a complete solution?

While sales materials and screenshots are designed to dazzle, many purchasers of a BI offering end up being disappointed with its capabilities once it's time to use the product in daily operations. For example, demonstrations often present impressive front-end graphics and dashboards, but this "eye candy" is actually a very small part of the story. What really matters is how quickly your own data can be leveraged to produce these exciting visuals. To make this happen, a significant number of BI packages mandate implementing costly and time-consuming data warehouses, data marts, and OLAP cubes.

While there's room for debate on the exact feature set necessary for a comprehensive BI offering, at a minimum it should supply reporting, analytics, visualization, and easy integration with a variety of disparate data sources. Furthermore, it should go beyond the pre-defined collection of queries and reports typically offered by enterprise-grade packages and let users define their own, dynamic interactions with data.

Is the solution easy to use and administer?

While all software packages mandate assistance from the IT organization, BI applications have typically been one of the most demanding. Thus, it's important that ongoing use of your selected system minimizes the amount of IT involvement required. One of the biggest burdens on IT is the mandatory data warehouses necessitated by many BI solutions. Ironically, configuring a data warehouse alone doesn't necessarily set the stage for a successful BI implementation. Rather, many enterprises are forced to go a step further and manipulate their data warehouses into structures such as data marts, star schema, snowflakes, and OLAP cubes. Unfortunately, once this subdividing, manipulating, and massaging starts, it never seems to end.

Will the package fit your budgetary constraints?

Using your own, existing hardware is a great way to tame the costs inherent in a BI solution. On the other hand, if you need to acquire new computers, be sure that your chosen BI offering is able to work with commoditized, off-the-shelf machines. Reducing up-front investment is especially crucial given that many BI implementations start as a pilot project and then expand. Along with expensive hardware specifications, many other BI budgetary traps exist, including:

- **Confusing, hidden pricing models.** BI vendors are notorious for being unwilling to publicly state their pricing, which often indicates a reliance on extensive consulting and/or other third-party markups.
- **Consulting-intensive solutions.** Consulting firms view BI implementations as cash cows. Thus, it's wise during the sales cycle to estimate the cost of expected professional services, rather than being surprised after you've signed a contract.

- **Technology-partner-based offerings.** A BI solution that requires a host of enabling technologies will always be more expensive (and complex) than a turn-key offering.
- **Lack of reference customers.** If you're a large enterprise, you'll want to ensure that there are a sufficient number of big implementations that demonstrate that the vendor can meet your needs. On the other hand, smaller organizations must be on the lookout for similar scenarios that prove that the offering is sufficiently powerful, yet affordable.
- **Lengthy learning curve.** Given the investment in hardware, software, training, and opportunity costs, it's vital that the selected technology offer as short a path to productivity as possible. To attain a sufficient ROI, users will need to derive value very quickly.

Will the solution scale?

Even the most successful BI implementation can run into difficulties when faced with increased data volumes and usage loads. Workloads increase for a number of reasons, including natural data volume growth, selecting additional dimensions for analysis, and incorporating new data sources. In addition to these factors, if the solution is providing value, new users will clamor for access, which only increases the load on the solution. Ironically, the initial success of a BI implementation often sets the stage for future heartache.

Can you easily evaluate the package?

Traditionally, most BI vendors have attempted to bypass the important evaluation stage, instead requiring prospective customers to trust them to deliver the right solution. To thwart evaluations, vendors make it difficult, if not impossible, to download software. This reluctance to demonstrate value prior to the purchase isn't surprising, given that even evaluating these packages requires extensive, consulting-intensive efforts. In those cases where evaluations are supported, the prospective customer is asked to expend significant funds to acquire hardware, pay for consulting, and train internal personnel. There's also no guarantee that the evaluation will work with the customer's actual data. All of these preconditions indicate that the BI solution shouldn't be treated as a software purchase per se; instead, it's more accurately described as a systems integration initiative that happens to involve BI software.

Conversely, a smooth, cost-effective pilot project is the best indicator that the production BI deployment will likely be a rewarding endeavor. Thus, it's wise to demand that each BI vendor candidate conduct a pilot project to prove that their solution will work in your environment and with your data.

How SiSense Prism Ensures BI Success

SiSense Prism was created to overcome the traditional obstacles that have plagued so many BI implementations. Let's look at how it addresses each of the five guidelines we just described.

1. Is the package a complete solution? Prism serves as a comprehensive BI platform, designed to aid teams ranging from small workgroups through small & mid-sized organizations all the way up to an entire enterprise. It greatly reduces the traditional BI load on the IT organization by not requiring extensive support or requiring the continual creation of new SQL queries. Instead, business users are equipped with all the tools necessary to become self-sufficient, including being able to create their own dynamic queries and reports without needing assistance from IT. Since it's so easy to create these new objects, there's sufficient time to take action and derive business benefits from what's learned.

To populate Prism, you're free to bring all of your data into a single location without needing to restructure it into aggregation tables, data marts, star/snowflake schemas, and so on. There are no restrictions on either the number of tables or number of fields within tables. By having a single copy of the data, everyone in the organization sees the same numbers, which also eliminates the database and network loads that naturally occur when everyone must download their own copy of data onto their desktops.

2. Is the solution easy to use and administer? In contrast with earlier generations of BI software, Prism doesn't require heavyweight, time-consuming structures such as data warehouses, although it's capable of working with them. It also doesn't necessitate OLAP cubes, yet is able to provide the dimensional model and multidimensional querying capabilities provided by OLAP.

Since Prism sports minimal training requirements, and doesn't require scripting or programming skills, non-technical users are quickly able to create and modify their own queries and reports. This lets them easily fine-tune their interaction with Prism and derive actionable insights much more rapidly than if they had to wait for IT to design, build, and publish new queries and reports. Creating attractive and intuitive dashboards is also within reach of these business users. For example, figure 1 illustrates the types of dashboards that may be assembled by non-technical users:

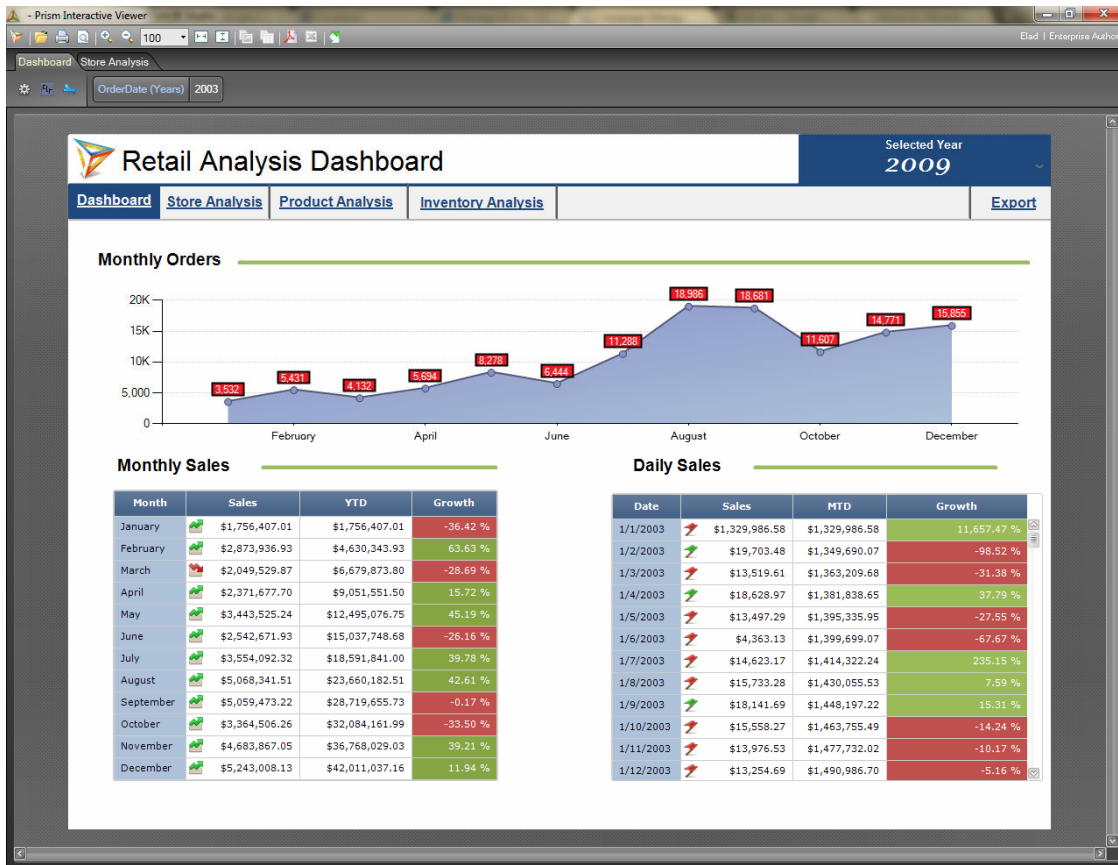


Figure 1: A user-created dashboard

Loading data into Prism is easy from popular databases such as Oracle, MySQL, and SQL Server along with non-database sources such as flat files and Excel spreadsheets. It's easy to import information from Internet-based sources such as Google AdWords and Google Analytics. Prism also provides extensive extract, transform, load (ETL) capabilities, as well as the capacity to easily consume new data sources and frequently-changing information without needing to rebuild the entire data model.

3. Will the package fit your budgetary constraints? As a software product vendor, SiSense derives its revenues from licenses, rather than lengthy professional service engagements. It eschews third parties and their markups, instead selling directly to its customers. Also, its license costs are openly displayed, with a variety of pricing tiers and deployment models to fit any customer's needs.

4. Will the solution scale? The designers of Prism understood that initial and ongoing information volumes, data sources, and user activity might vary widely, and that their mission of providing enterprise-class BI to customers that had previously been unable to deploy it would require a different approach to scalability. Thus, Prism is designed to scale incrementally, at a pace that's comfortable for the customer. This preserves investments in existing queries, reports, dashboards, and other user-created assets.

5. Can you easily evaluate the solution? SiSense has a very progressive view regarding pilot projects: their complete software offering is available for download as a free, fully-functional trial version. This proves their confidence that prospective customers will be able to successfully conduct a self-guided pilot project that works with meaningful, live data without the need for external consulting assistance. For those prospective customers who want additional guidance, SiSense offers live, online demos.

Conclusion

Faced with an increasingly complex, fragmented product landscape and active vendor resistance to software evaluation, it's easy to understand why it's not an easy time to be tasked with the responsibility for evaluating and purchasing a BI solution. Even after the purchase has been made, far too many BI customers are faced with the disturbing reality that their investment has failed to reach its projected potential and has delivered a lackluster ROI instead.

To avoid these discouraging results, it's essential that any prospective BI customer take the initiative to educate themselves on the marketplace as well as develop a set of well-thought-out evaluation criteria. In particular, it's wise to be wary of vendors that attempt to obfuscate their pricing, discourage evaluations, and rely heavily on professional service firms.

To learn more about SiSense Prism, be sure to download your free 30-day fully-functional trial version from www.sisense.com/prism-free-trial.aspx

About the Author

Robert D. Schneider is a Partner at Think88 Ventures LLC. Based in Silicon Valley, and drawing from a deep pool of global talent and expertise in a wide variety of disciplines, Think88 delivers high-value solutions quickly and cost-effectively in the following practice areas:

- High performance data warehousing design, development, and optimization
- Consulting and training based on modern Service Oriented Architecture (SOA) and Cloud Computing technologies
- Technical marketing content creation, including competitive analysis, case studies, and white papers

He has provided database optimization, distributed computing, and other technical expertise to a wide variety of enterprises in the financial, technology, and government sectors. Clients have included JP Morgan Chase & Co, VISA, HP, S.W.I.F.T., and the governments of the United States, Brazil, Malaysia, Mexico, and Australia. Robert has written 6 books and numerous articles on database technology and other complex topics such as Cloud Computing, and Service Oriented Architecture (SOA). He is a frequent organizer and presenter at technology industry events, worldwide.