A New Business Model to Drive Business Intelligence Acceptance and Adoption

A White Paper

Copyright © 2007 Pentaho Corporation.

For the latest information, please visit our web site at www.pentaho.org

Last Modified on June 13, 2007

Contents

Contents 2
Executive Summary 3
Phase One: Initial Investigation 3
"Time is Money" 4
Professional Open Source 4
Phase Two: Vendor Investigation 5
Proprietary Vendors and Information Provisioning 5
Requirements Distortion 6
Professional Open Source: Openness and Transparency 7
Phase Three: Vendor Selection 8
Selection Criteria 8
"Feature Compilation" 8
"Incumbency Premiums" and The BI Standardization Paradox 9
Value Justification 10
Business Intelligence Benefits and Diminishing "Return on Features" 10
Professional Open Source in the Vendor Selection Phase 14
The New Best Practice in Evaluating BI 14
Conclusion: Getting Started with Your First Open Source BI Evaluation 15
Appendix A: Myths and Misperceptions of Professional Open Source Business Intelligence 16

Executive Summary

Business intelligence (BI) is a well-established and generally well-known software category that spans a wide range of functional capabilities. Specific definitions will vary from customer to customer and vendor to vendor, but most will agree that business intelligence typically refers to the challenge of providing business users with meaningful information from company data sources to help those users make better, more informed business decisions.

Traditionally, it has been time-consuming and expensive for a given customer to evaluate, select, purchase, and maintain the right BI technology to address their needs. While information on BI is readily available from many different sources, customers still face significant challenges relative to time, expense, and accuracy throughout BI technology investigation, vendor engagement, and final technology selection.

Professional open source BI radically alters the economics of all three of these phases in a way that reduces costs and risks for prospective BI users. This does not suggest that open source BI will be the right choice for every organization in every BI deployment. However, it does suggest that the economics of evaluation heavily favor open source BI, and that pragmatic organizations should increasingly consider open source BI *first*, and only initiate a traditional, high-risk, high-cost evaluation of proprietary BI when and if they determine that the business requirement cannot be satisfied using a professional open source alternative. Furthermore, this paper does not attempt to minimize the importance of proper BI requirements gathering, or technology-independent best-practices for BI deployment. The reader is encouraged to consult the many other available resources on these important subjects. This paper instead focuses on the **technology consideration and evaluation** dynamics, and the significant advantages for prospective customers that professional open source business intelligence can present in this area. This paper also assumes that the ultimate driver behind the prospect's activity is to deliver a successful BI deployment that meets user and technology requirements at the lowest total cost of ownership (TCO).

Professional open source: This paper draws a distinction between "professional open source" and "open source", where "professional open source" refers to an open source project *with professional technical support and commercial backing*, in contrast to a project *without professional support or commercial backing*.

Phase One: Initial Investigation

Typically, whether an organization already has experience with business intelligence technology or not, there is an initial phase of investigation before any vendors are contacted. Generally, the goals of this phase are to develop some concrete ideas for BI usage and benefits, and to get an initial feel for available technologies and alternatives. Some prospective organizations enter this phase with a very detailed understanding of their business and user requirements, while other organizations are generally aware of "business pain" in the organization related to information access, with a plan to develop more detailed requirements iteratively throughout the investigation phase.

Many resources are available, and while it's unlikely that they can provide a detailed or complete picture of the final solution for any given customer, these resources are useful for the purposes of initial investigation and help prospective buyers/users get educated at a high-level.
Common resources include:

- Online research – articles, vendor websites, white papers
- Conferences and trade shows
- Use of vendor marketing materials – ads, datasheets, recorded demos
- Networking with colleagues
- Consultation of internal "approved vendors" or "technology standards" documents and policies
- Use of third-party consultants to perform technology analysis or to assemble requirements

"Time is Money"

It is certainly true that this kind of investigation can be useful for many reasons: risk reduction, potential time or money saved "down the road", self-education, reduction of alternatives for consideration, refinement of requirements and more.

That said, whether it's one individual spending an hour doing research on the web, or a team of cross-functional representatives over a period of weeks, the "soft costs" (or hard costs if consultants are hired) associated with this phase vary directly and proportionally with the amount of time and people involved. Accepting the potential benefits previously mentioned, it is still true to say that this is not a "free" process. Beyond that, if there is a critical BI need in the organization, every day spent in this phase is another day of living with that business pain, the "opportunity cost" associated with delaying the ultimate benefits of the project.

The proprietary software model typically has a number of limitations related to this phase:

- Excessive dependency on vendor-sanitized and filtered marketing materials
- Limited or no access to real product, or product documentation
- Limited or no access to actual user experience or feedback outside of published case studies
- Feedback from other users only in the form of pre-screened, "canned" references

These limitations are exacerbated in later phases and will be discussed in more detail later in this paper.

Professional Open Source

Professional open source offers significant advantages in terms of achieving the goals of this phase while minimizing the time and "margin for error" in this process. Compared to a closed, proprietary software model based on up-front software license fees, the professional open source model is distinguished in this phase by a much greater level of access, openness, and transparency to information as well as to fully-functioning product.

While marketing materials summarizing product features, customer examples, and competitive advantages will still be available from professional open source companies, the professional open source model

supplements these resources with **direct access** to product, technical documentation, product roadmaps, and user forums. Prospects are able and even encouraged to directly review and consider these resources, which in many cases can provide a much faster and ultimately more reliable view into a potential solution than wading through reams of proprietary vendor marketing materials, or "negotiating" with proprietary vendors for 30-day evaluations and access to documentation.

Phase Two: Vendor Investigation

Proprietary Vendors and Information Provisioning

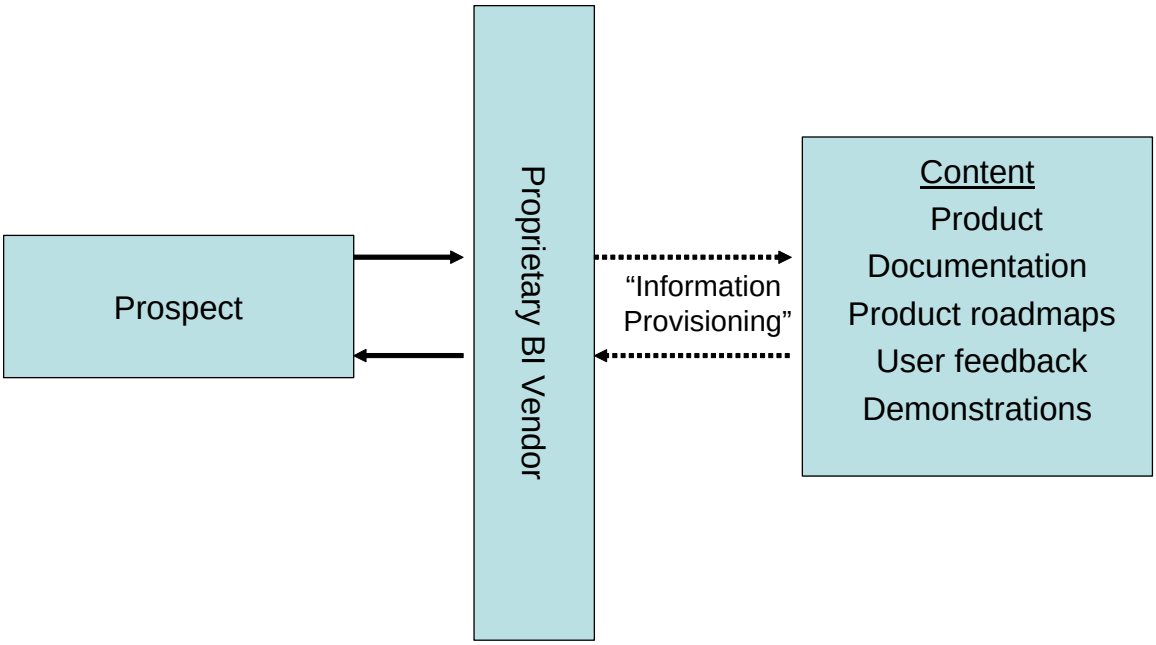
At some point in a traditional business intelligence evaluation process, one or more vendors are contacted as part of a request for additional information. Prospects typically ask for one or more of the following:

- Response to a Request for Information (RFI) or Request for Proposal (RFI)
- A product demonstration
- A Proof-of-Concept
- A list of customer references
- Product documentation
- Evaluation software
- Product roadmap information
- Competitive comparison documents
- A live, telephone, or web-based meeting to have a discussion and ask questions

It is critical to understand the role of the proprietary BI vendor in this process. While proprietary BI vendors are interested in the ultimate success of their prospects, their primary role in this phase is to manage the prospect's investigation to an ultimate outcome of a "closed deal" for proprietary BI software licenses. Managing this process almost invariably involves some combination of:

- "Parceling out" of non-public information on products, customers, competitors – typically provided in exchange for certain commitments and concessions from the prospect including additional details on the project, access to other employees (executives, decision-makers) in the prospect's organization, establishment of timelines for purchasing, etc. Proprietary vendor Non-Disclosure Agreements (NDAs) are frequently a required part of this process to ensure that information shared with a given prospect or customer does not become public knowledge, which would undermine the ability of the sales representative to control the "information provisioning."
- Influencing requirements to ensure that the salesperson's product offering appears more attractive to the customer than competing alternatives.

This is not to suggest that either behavior is inherently dishonest or negative. The point is simply that the interests of the prospect and the interests of the proprietary vendor are only "loosely aligned", and that the proprietary vendor's core definition of a "successful outcome" (a closed license transaction) is different than the prospect's (a successful BI deployment).

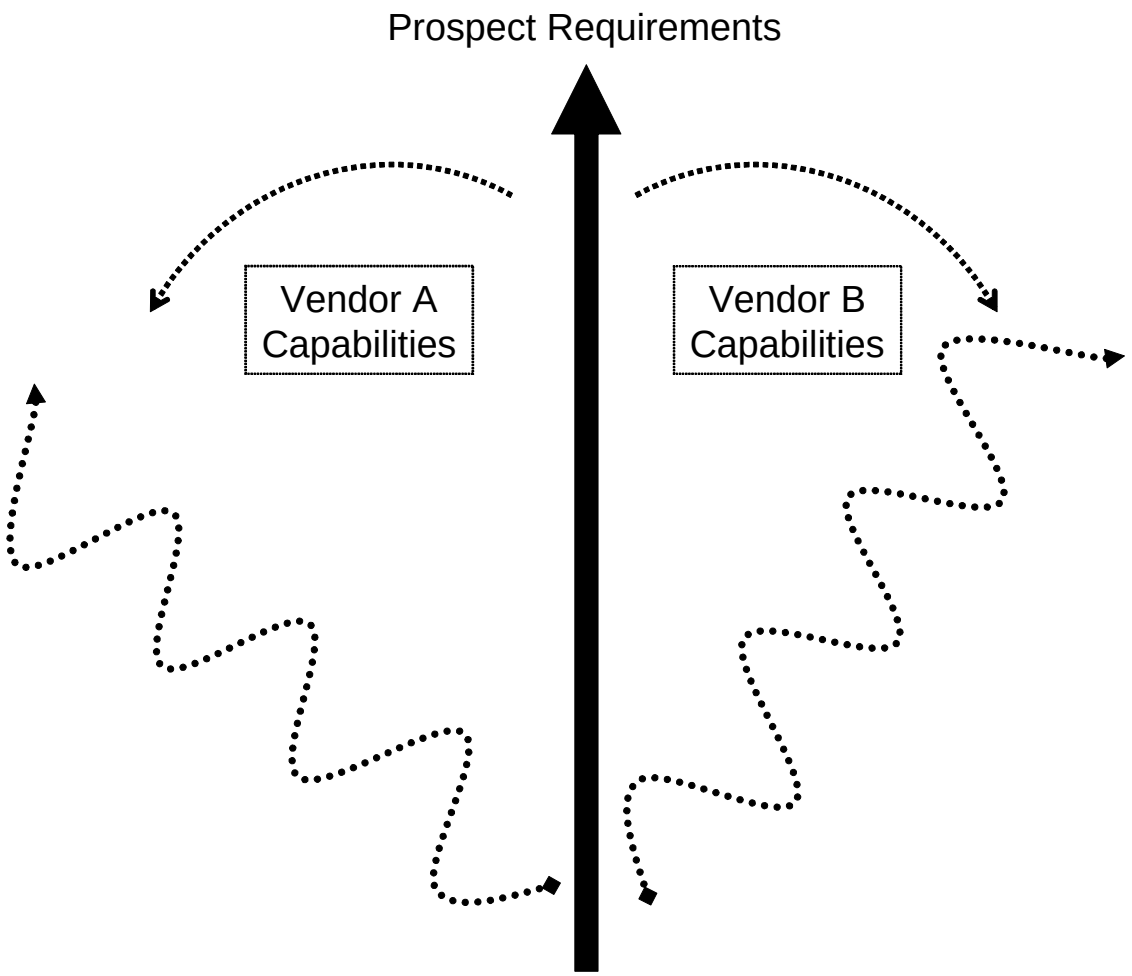


"Information Provisioning"

Proprietary BI Vendors Limit Prospect Access to Information

Requirements Distortion

It's also important to consider the potentially significant role a salesperson plays on influencing of prospect requirements to match their proprietary product's capabilities. Because of the limited access created by the proprietary BI sales model, salespeople are able to command a much better understanding of their product's capabilities and limitations, and this knowledge is almost invariably used to drive or "distort" customer requirements to the strengths and capabilities provided by that vendor. This, too, is not unethical, nor is it a carefully held "trade secret." This is taught in sales training at every proprietary BI company. Again, the ability to significantly distort prospect requirements is **fundamentally predicated on the limited access to real in-depth information** that is protected and provisioned by sales professionals in the proprietary model.



"Requirements Distortion"

Competing proprietary BI vendors influence and distort prospect requirements to align to their offerings

Professional Open Source: Openness and Transparency

The professional open source model builds on openness and transparency, significantly reducing the need for "information provisioning." It allows for significantly reduced risk, and a much more efficient process for prospects (as well as the professional open source provider by the way) by allowing significant access to useful prospect information, including the items mentioned above like user feedback, product documentation, product roadmaps, demonstrations, software access, and even source code if so desired. Sales professionals are still available to assist with questions in a professional open source model, and sometimes, prospects will find it faster and easier to simply contact a salesperson to get key questions answered or to more rapidly identify public resources. But the key point here is that the professional salesperson's role in the professional open source model is more commonly to *accelerate and streamline* access to information, rather than to *control and restrict* access as in the proprietary BI software model. In the professional open source model, rather than distorting customer requirements or restricting access to

information, sales personnel are outlining and explaining value-added services that complement the open source software to ultimately improve the customer's likelihood of success with business intelligence.

It's also worth pointing out that in the professional open source model, the prospect has far more control over *when* in the evaluation cycle to involve the vendor. Because of the "information provisioning" phenomena in the traditional proprietary software sales model, prospects are typically forced to engage a salesperson quite early in the process in order to gain access to critical information. As a counter-example, in some cases in the professional open source BI evaluation model, the salesperson may actually first be contacted *after the software is deployed in production*, for the simple reason that the prospect had direct access to the information needed during the vendor investigation phase.

Phase Three: Vendor Selection

Selection Criteria

Selection criteria ultimately drive the decision and direction in selecting a BI products and/or services vendor. The dynamics of the previous phase ("Vendor Investigation") and the stark differences between the proprietary software and professional open source models have significant implications in the vendor selection phase. Selection criteria will be determined by product-related user requirements, with some small or large level of "requirements distortion", along with vendor criteria (non-product-related criteria for choosing a vendor) as well as intangibles and other nuances that frequently influence the selection process for business intelligence.

"Feature Compilation"

It is not uncommon for organizations, especially medium-sized and larger organizations with diverse user requirements, to take steps to attempt to simultaneously minimize time spent on selection, while presumably reducing organizational risk. "Feature Compilation" refers to a process whereby organizations focus less on known, documented critical user and business requirements, and instead compile large lists of functionality (frequently assembled by a third-party) on the assumption that "checking the boxes" for large numbers of features will generally reduce the risk that a critical required feature will be overlooked, and will increase the likelihood the ultimate user needs will be addressed by a selected technology.

Many prospects have traditionally considered this to be a "necessary evil." Users, especially those unfamiliar with business intelligence, are unlikely to fully understand their needs at a detailed level, or to have deeply considered both short-term and long-term requirements. Even if they could, the business environment changes rapidly, such that "today's" requirements could be insufficient in "tomorrow's" world. Again, this leads to a tendency to assemble long lists of "standard" or "required" functionality to reduce risk, and to reduce the (potentially huge) amount of time required to *iterate simultaneously* through refinement of user requirements while navigating the "information provisioning" realities of the proprietary business intelligence sales cycle. In instances of significant requirements distortion, this can become an exercise in simply taking a functional inventory of available offerings to see which vendor provides the longest list of available features. Note that very few personal or corporate purchases are made on these kinds of criteria. In the consumer world, it's a small minority of buyers who purchase the automobile or the house that has the

"most features." And in the corporate world, everything from selection of office furniture to hiring of a potential employee for a given job almost invariably goes beyond a "which has the most features?" discussion.

Budget plays a significant role in most purchasing considerations. If every car or house cost the same, far more people would choose the largest or most "feature rich" car or house. If every prospective employee had identical compensation requirements, far more employers would hire over-qualified employees. It's the tradeoff between prioritization of needs, and economic resources that come together to determine the right choice. But most prospects have far more experience with driving a car, or living in a house, or even hiring employees than they have with selecting business intelligence software, and this can put them at a significant disadvantage to a salesperson when attempting to understand what they really need, and what it's worth when it comes to selecting BI software and services. Imagine if a car salesperson said to you "This car has an air-conditioned trunk." You probably know, for yourself or your family, whether that feature is important to you and what you'd be willing to spend on it. But in the BI world, technology evolves rapidly, proprietary vendors have strict control over access to information, and it can be far harder to determine the relative importance and value of a "hot off the presses" new BI feature. Again, this process can often lead to "feature compilation" that may go far beyond actual needs.

"Incumbency Premiums" and The BI Standardization Paradox

"BI Standardization" has emerged as a key marketing theme for proprietary BI vendors over the last decade. The idea behind BI standardization is that by selecting one vendor to address any and all BI projects within large organizations, that organizations will be able to use BI more strategically, and will reduce the costs associated with BI. The presumed incremental costs associated with deploying multiple different BI technologies are usually attributed to redundant training costs and skill-sets, reduced "volume purchasing" power, redundant hardware, and other items.

But the traditional BI standardization model is built on the assumption of **roughly equivalent procurement costs** between BI alternatives. This was a valid assumption when most, if not all, of the viable BI alternatives were proprietary offerings with generally similar up-front license costs. If you assume for simplicity's sake that every BI alternative will cost you roughly $1,000 per user, then spending an additional $5,000 to send an administrator to an extra training class to learn a new BI environment may net out to be a meaningful difference in costs. Perhaps an additional server would add $10,000 to the costs associated with deploying another BI solution rather than the incumbent "standard."

But when a professional open source BI alternative provides the opportunity to **reduce BI-related fees by an order of magnitude,** the "apples to apples" assumptions about technology acquisition costs evaporate. Simply put, the "old math" doesn't apply, and prospects need to re-consider their *original intent* (which was to save money), rather than following the "BI standardization path" based on assumptions that are no longer true. "The BI Standardization Paradox" is the reality that when enterprise-class, professional open source BI technology is readily available and professionally supported, standardization on proprietary BI will actually end up costing *more*, rather than less.

Some of the same assumptions that have driven proprietary BI vendor marketing around BI standardization have also created "incumbency premiums" for entrenched BI vendors. Once a prospect has made a

significant investment (license fees, integration and deployment effort, training) in proprietary BI, those prospects in some cases create a situation where their "preferred standard" will actually cost them *more* for their next BI project than it would have if they weren't "standardized." Standardization on proprietary BI creates BI vendor leverage (in some cases to the point of vendor lock-in), and proprietary BI sales professionals can't ignore that leverage. When a new project comes up, the entrenched vendor can now build a case around the incremental costs of learning and deploying another BI stack, and can use those projected costs to charge *more* (by way of a smaller discount) than they would have charged for the original BI project at the customer organization.

Here's another way to look at it. When an organization is considering BI, proprietary vendors have every incentive to provide partial discounts (in some cases steep discounts) on license fees to win the customer's initial business. The proprietary BI vendor in this example has little if any leverage, and is likely competing with other proprietary BI vendors, at roughly similar price-points, to establish their technology within the customer organization. But after the first project, every additional project deployed on that same proprietary BI vendor's technology creates greater vendor leverage vis-à-vis their customer.

Value Justification

Given tight IT budgets and competing priorities, value justification, also known as Return on Investment (ROI) analysis is a required and sensible part of the vendor selection process, but this too puts many prospective customers at an information disadvantage relative to their vendor. Sales personnel are frequently enthusiastic to help with such value justifications, because ultimately this is part of the overall negotiation process, and the amount your company is willing to spend on BI software will be significantly influenced by the ability to justify its value.

If we go back to the car analogy and the example of an air-conditioned trunk, consider how a car salesperson might help you justify the value of such a feature. Suppose that air-conditioning in the trunk of the car cost $500. To justify the value, a salesperson could describe a hypothetical situation where you're attending a wedding of someone in your family, and that you're bringing the appetizers as well as the cosmetics for the wedding party. If the wedding were to take place in a very warm climate, and you assume that the appetizers were highly-perishable, and the expensive cosmetics were very heat-sensitive, it would be very easy to imagine a situation where a $500 air-conditioned car trunk would "pay for itself", even a situation where *disaster might ensue* without it. But again, where the analogy breaks down is that it's far easier for the average person to understand the likelihood and alternatives in this kind of a situation with an automobile, than with BI software. Many of the most successful proprietary BI salespeople make their living by creating unlikely or even obscure scenarios where a single feature (always a feature that their product has that their competitor's product does not) becomes the single most critical determinant of resounding success, or miserable failure of a BI project.

Business Intelligence Benefits and Diminishing "Return on Features"

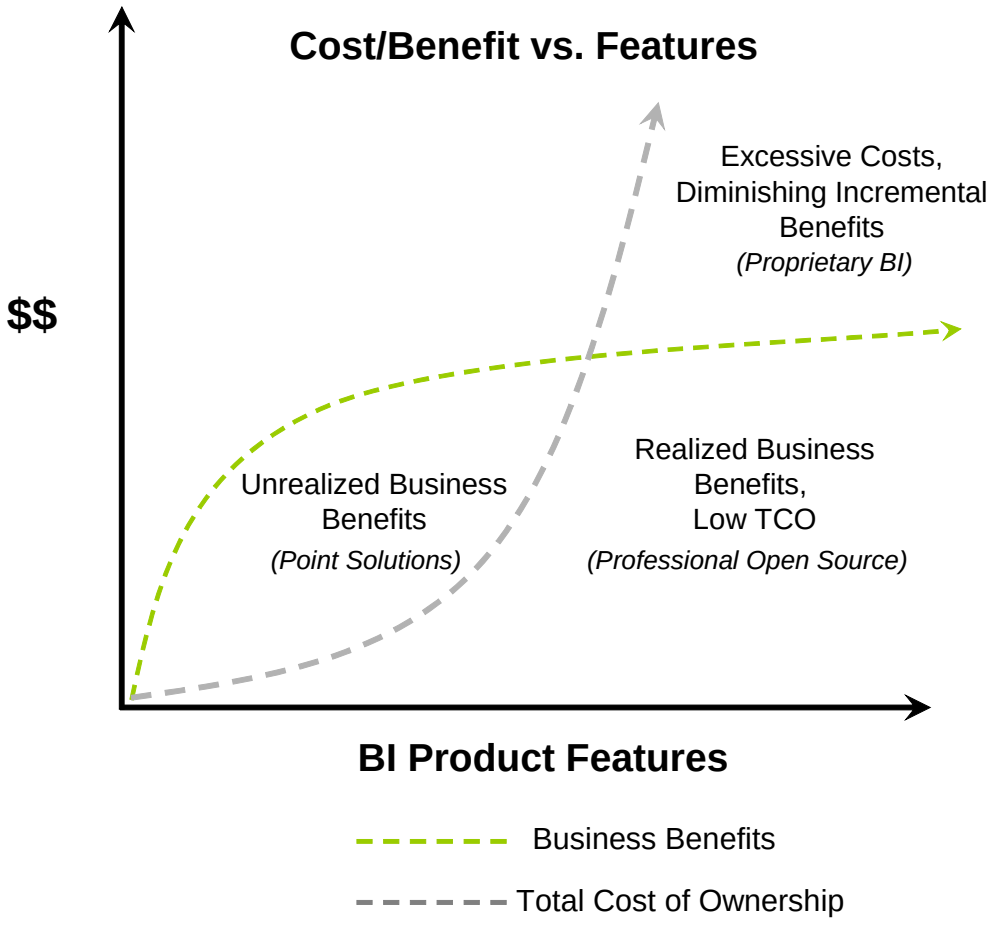
Most organizations selecting BI products and vendors initiated the process because of a critical business pain. That business pain might be an inadequate understanding of customer behavior, inefficient internal

processes, limited visibility into key operational metrics, poor sales productivity, or thousands of other BI pains. Business intelligence is used for applications as diverse as:

- monitoring the effectiveness of new genetic drugs
- setting the price of airline seats
- analyzing regional auto traffic flows
- monitoring budget spend by department
- tracking maintenance and readiness of combat aircraft

The critical business pains that drive investigation and evaluation of BI technology are frequently customer-specific, and are the real driver behind the overall return on BI investment. Given a functional and reliable business intelligence system, there is a point (which will vary slightly from one prospect to another) where incremental features will *increase total cost of ownership, with little if any marginal impact on business value.*

The graph below illustrates this concept.



The key point is that there is a certain critical set of functionality required to deliver the majority of business benefits of business intelligence, and there is a point at which additional functionality will increase costs (in some cases very significantly) without additional business benefit. The left side of the curve reflects

prospects who select BI offerings that don't meet their requirements in key functional areas, and as a result fail to fully realize the business benefits of BI in their organizations. The right side of the curve reflects prospects who "over-buy"; who invest incremental time and money to deliver additional functionality that does not provide meaningful incremental business benefits. Many veteran BI customers openly admit that they only use 30%-40% of their proprietary BI tool's features, and that they upgrade to new releases simply to retain product support, rather than to deploy or use additional features.

To use more of an everyday analogy, imagine that your "business requirement" for a personal transportation solution was to get from your house or apartment to your workplace every day, that the distance is roughly 25 miles or 40 kilometers, and your key needs are to be able to complete the trip in under an hour, and to be able to drive in any typical weather conditions (heat, rain, fog, etc.). One alternative would be a skateboard, which would represent an extremely inexpensive transportation alternative, but one that would not reasonably meet your core requirements. In this instance, even the $50 you spend on the skateboard is wasted money because it doesn't address the key requirements. Another transportation alternative would be the Space Shuttle. The Space Shuttle would provide numerous additional capabilities – allowing you to achieve weightlessness, exceed the sound barrier, and view the earth from hundreds of miles above. But for almost anyone, the incremental costs of obtaining and operating a Space Shuttle would far outweigh the incremental value of the "features" that exceed the original core requirement. Finally, consider a car, which would cost more than a skateboard, and far less than a Space Shuttle. Most cars would meet the core requirement (unlike the skateboard) at a far lower cost than a Space Shuttle. You'd have to be willing to make the "tradeoff", and forego the incremental functionality of the Space Shuttle, but the car would provide a solution that addressed the core requirement without spending more than was necessary for non-critical features.

To quantify this in a way that one could incorporate into standard value justification of a BI project based on ROI analysis, consider the following model:

$$\textbf{Return on Investment} = \frac{\textbf{Business Value}}{\textbf{Total Cost of Ownership}}$$

Or

$$\textbf{ROI} = \frac{\textbf{BV}}{\textbf{TCO}}$$

In this model, greater incremental business value increases return on investment. Lower total cost of ownership also increases return on investment, and conversely, higher total cost of ownership reduces overall return on investment. Unfortunately, there is not a simple, mathematical way to model the incremental impact of a given feature or set of features on the business value, or the total cost of ownership.

Let's consider a typical BI scenario to understand how these factors interrelate, and how this approach can be applied to understanding the value of BI functionality. Assume a simple, traditional business intelligence example where a company believes that it can reduce costs associated with inventory stock-outs by

providing better visibility into distributed inventories, localized customer demand, and marketing programs that may be influencing customer demand in different local markets. Many organizations have solved this basic problem with business intelligence, and it's not out-of-line with historical examples to assume a 15% reduction in costs associated with inventory stock-outs by providing better and earlier visibility into inventory levels and demand rates in different markets, and using that knowledge to more effectively drive marketing (advertising, coupons, in-store sales, etc.) If a company wasted $1M USD last year because of inventory stock-outs, the *business value* associated with a 15% reduction would be $150,000 USD.

Now let's consider the role that BI functionality plays in achieving this benefit. In a simplified form, the ability to access and integrate information from key inventory, purchasing, and marketing systems is a core requirement. And the ability to present it to business users with the metrics, and in the format that they require is also a key requirement to deliver the ultimate *business value*. But suppose one BI system offered an additional feature, which for rhetorical purposes we'll fictionally call "dynamic parallel hyper-drilling." The key question then is "how much incremental *business value* (if any) is provided is by that feature, and how much incremental *total cost of ownership* (if any) is associated with the procurement or deployment of that feature?"

In some instances, the incremental cost is actually relatively easy to model once you understand the cost difference (up-front license fees, deployment costs, maintenance, training for users) associated with that feature. The incremental business benefit is often nebulous, and hard, if not impossible to quantify. As you start to consider the incremental costs and incremental business benefits of *multiple* additional features, it becomes clear that paying the highest price for the most functionality is not a strategy that will maximize ROI.

If we revisit the conceptual model for determining ROI,

$$\mathbf{ROI} = \frac{\mathbf{BV}}{\mathbf{TCO}}$$

business value essentially becomes a constant in the equation, rather than a variable. If business value is a constant, then the increase or decrease in TCO becomes the primary determinant of overall ROI on the project.

There are two other easy ways to illustrate this point. First, consider reviewing 3-5 case studies from a handful of different BI vendors. Focus on the described customer business problem, and the benefits and ROI associated with the BI deployment. Now ask yourself (or ask the proprietary BI sales rep if you like) what features *specific to that vendor* were significant and fundamental drivers of the overall *business value* achieved in the BI deployment. As an alternative, ask another BI user (perhaps even another department in your own company) who recently upgraded their BI deployment to the vendor's latest version what the new features are in the latest release, and how much (if at all) those new features have contributed to incremental *business value* in the business.

Professional Open Source in the Vendor Selection Phase

Beyond features and acquisition costs, many other factors play a role in BI vendor selection. Typically, when a proprietary BI vendor recognizes that the conversation around product capabilities and TCO does not play in their favor, "requirements distortion" comes back into the customer dialog in a different form. In this case, rather than distorting and influencing the customer's requirements for BI technology, it becomes a conversation to distort the customer's requirements of the vendor. Relative to professional open source BI, misrepresentation and misinformation typically follow. Thankfully, the professional open source model again provides a high degree of transparency for prospects, making it relatively easy for prospects to determine whether the professional open source BI provider will meet their requirements from a vendor perspective.

In fact, many of the vendor requirements speak to the very nature and intent of the *professional* open source model as described earlier in the paper. When people hear "open source", they often think "free software", and this reaction is understandable. But for many organizations, especially when considering a technology as strategic and business-critical as business intelligence, "free software" doesn't on its own constitute a reliable solution. Professional open source companies like Pentaho exist in large part to address the gap between "free software" and a reliable, low-risk, successful long-term BI deployment. Professional open source BI goes beyond "free software" to provide critical additional product and service components including:

- Professional Technical Support, with service level commitments, escalation processes, and 24 X 7 availability if required
- High-quality product documentation
- Professional training, including customized training and onsite training at customer facilities if so desired
- A professional development team and development methodology, to ensure sound technology architecture and enterprise deployability
- Product management to continually align product direction and priorities to customer requirements and market needs
- Intellectual property indemnification, to avoid any perceived risks associated with the use of open source software

Together, these components and services turn free open source BI software into a low-risk, low-TCO, and enterprise-deployable alternative to traditional proprietary BI.

The New Best Practice in Evaluating BI

Professional open source business intelligence fundamentally transforms the economics of evaluating BI technology. The "old model" gave proprietary software vendors excessive control, allowing them to "manage" customers through an evaluation cycle by restricting access to critical materials and content for evaluation. Beyond that, proprietary vendors had the opportunity to distort and overly-influence initial customer requirements to align them to their proprietary offerings.

Professional open source gives customers the advantage, allowing free and unfettered access to production-quality technology, full product documentation, user feedback, and even source code if desired. This allows

prospect organizations to quickly prove for themselves whether or not open source BI will meet their key requirements and make them successful with BI more quickly, and at a fraction of the cost of proprietary alternatives.

The new best practice in evaluating BI starts here. As prospects identify new BI needs and projects within their organizations, the economic advantages of open source BI make it clear that organizations should first identify professional open source solutions that might be able to address the problem. If it can, the significantly lower TCO will reduce the risk of the overall project, and drive greater ROI by delivering the same business benefits at a lower cost. If the key requirements cannot be effectively addressed by a professional open source solution, prospects can of course initiate a more traditional BI software-license engagement with a proprietary vendor. And it's worth noting that the process of evaluating the open source alternative initially will actually provide you with a better understanding of your requirements, and should accelerate your cycle of evaluating proprietary BI when and if necessary.

Conclusion: Getting Started with Your First Open Source BI Evaluation

Many organizations recognize the significant savings available relative to evaluation and long-term deployment using professional open source BI, but are unsure exactly how to "take the first step." This is where the openness and accessibility of the process, and the standards-based nature of professional open source BI software really come to the forefront.

It's worth pointing out that open source should not be viewed as an "all or none" proposition. Much in the same way that many organizations have a mix of hardware platforms and operating systems, there is no reason to consider a "top to bottom" switchover from proprietary BI to open source BI. This approach would be impractical, and in fact there are many examples of organizations pragmatically using open source and proprietary BI within the same company, many times even within the same deployment.

While open source BI has already proven itself for large scale deployment in sophisticated BI applications with large numbers of users and data, in the interest of establishing your organization's first key success with open source BI, Pentaho recommends first identifying a new BI project in the company that could be classified as non-strategic, non-mission-critical, and low-risk. Again, this is not because of software limitations, but because the dynamics, politics, and purchasing cycles in most medium and large organizations are such that this is the easiest, fastest way to generate success with open source BI. Once that success has been achieved, it can be replicated and expanded to larger and more strategic projects like so many organizations have already done.

Appendix A: Myths and Misperceptions of Professional Open Source Business Intelligence

As discussed in this paper, professional open source BI creates a new and very different model for the selection of BI technology, with much greater customer access and control. From the perspective of competitive strategy for proprietary BI vendors, the best strategy is to discourage prospects from even considering evaluating open source BI.

Below is a list of common claims and objections that proprietary BI vendors will often raise relative to open source BI. It's worth noting that many of these same objections were initially raised relative to Linux when customers in the operating system market sought out an alternative that could provide similar (if not superior) technology at a much lower TCO.

"Open source business intelligence isn't 'ready for prime time', and doesn't have all of the features of proprietary BI."

While open source BI achieved initial awareness in the embedded reporting market, many open source BI projects have been in development for many years, through many versions of the software. Professional open source BI now offers:

- Operational, analytical, ad hoc and financial reporting
- Interactive OLAP analysis
- Data integration / ETL (Extract, Transform, Load)
- Enterprise dashboards
- Data mining and advanced statistics

Prospects are invited and encouraged to go to Pentaho's website to evaluate Pentaho's capabilities relative to their requirements. Public customer examples are also available online.

"Open source BI is about marketing hype and downloads. No one's really using it."

While it is true that the average 100,000 downloads per month of Pentaho's open source BI projects represents a total potential user count that is larger than the installed bases of Business Objects, Cognos, and Hyperion combined, the real proof about open source BI adoption lies in the customer examples themselves, and significant third-party research.

Ventana Research published a research survey in 2006 showing that among more than 300 surveyed organizations, *all of whom were already using proprietary BI*, 40% were deployed or in deployment with open source BI, with an additional 43% considering open source BI. This study from Ventana Research, with significant additional information on open source BI adoption, is available here.

Below is a small sample of the many organizations around the world that use Pentaho's professional open source BI to address their BI needs, from reporting and OLAP to dashboards, data integration, and more.

DivX Corp. (NASD: DIVX)
Unionfidi S.C.
Terra Industries (NYSE: TRA)
MySQL
ZipRealty (NASD: ZIPR)
iStockphoto

"Proprietary BI has been proven in thousands of customer implementations. You don't want to risk failure by using open source BI."

Much has been written on the subject of why BI projects fail. Experienced consultants, industry analysts, and even BI users have shared opinions and advice on the subject of avoiding business intelligence failures. A Google search on "business intelligence failures" turns up a number of resources. Common themes include lack of investment in training, lack of executive sponsorship, inadequate partnership between business users and the IT department, poor communication to consultants, and more. What you *won't* find is any experienced, non-vendor-employed BI professional who would cite *lack of non-critical features*, or *the fact that the BI technology used was open source* as reasons for BI failure. The key takeaway is that while there are many critical drivers of success or failure with business intelligence, none have any specific correlation to whether the BI technology used is proprietary or open source.

Recommended article: "Business Intelligence Project Pitfalls", Claudia Imhoff, Ph. D, The B Eye Network

"Open source software isn't secure. You don't want to expose your critical internal information by using a non-secure open source BI suite."

This claim has been used to disparage open source software for years, and has been repeatedly disproved and debunked. This article references numerous studies and research that have proven repeatedly that open source software is generally *more secure* than proprietary software.

This article, covering Gartner Group's Open Source Summit also highlights proprietary vendor FUD (fear, uncertainty, and doubt) tactics, and the many false claims made about open source software by proprietary software vendors.

"Open source BI relies on a community to develop and support the code in their 'spare time.' "

This is a misrepresentation of professional open source, as defined in the beginning of this paper. This is one of the key services Pentaho provides as part of a Pentaho Subscription. Pentaho employs professional support technicians and software engineers, and provides service level agreements (SLAs) to customers. While Pentaho has a large and actively-contributing community, reported customer issues are addressed by Pentaho's paid professional staff. Beyond that, Pentaho employs professional product managers to define product roadmaps and to ensure continuing alignment of Pentaho's products to customer and market needs.

"You get what you pay for."

No one has *ever* shown a positive correlation between the amount of money spent on BI software licenses, and the ultimate benefits delivered by BI. In fact, in instances of BI failure, the magnitude of the failure is in many cases measured most directly by the amount of money spend (in the case of failure, wasted) on expensive software licenses, leaving a limited budget for added value-added services from experts such as consulting, training, and developer enablement technical support. Please also see the prior question on the risks of business intelligence failure.

"There's no such thing as a free lunch."

This is absolutely true. Even without expensive proprietary license fees, business intelligence is not free. Maximizing the value of BI in your organization requires an investment of time, and almost always money (integration, training, design, hardware, maintenance, consulting). Offering enterprise-class BI technology without huge up-front license fees should not be mistaken for an offer of a "free lunch."

"Open source licenses are legally risky. You're safer just using proprietary BI."

This is provably false, and ignores the fact that *every major proprietary BI vendor includes open source software* in their offering. As an example, public SEC filings by Business Objects cite their inclusion of open source software in their products and distributions. From the public filing:

"We use selected open source software in our products and may use more open source software in the future….. We may also be subject to claims that we have failed to comply with all the requirements of the open source licenses."

As mentioned, every major proprietary BI vendor distributes or includes open source technology as part of their distributions. This can take the form of included application or web servers like Apache Tomcat, embedded databases like MySQL, or embedded libraries that provide functionality within the proprietary executables. The key takeaway is that whether you choose proprietary BI software or professional open source BI from Pentaho, you will be using open source technology, and no license that a proprietary vendor can provide you will eliminate any perceived risks associated with the use of open source software.

"Open source will cost more in the long-run, given training, implementation, and customization costs."

There is no data to support this. Making this case typically involves a spreadsheet concocted by a proprietary BI vendor that either makes "estimates" around increased training or consulting costs associated with open source software, or attempts to equate a lack of certain vendor-specific features with fictitious increases in required IT headcount, longer deployments, and more. There is no actual research to support any of this. Note again that all of the leading proprietary vendors include proprietary software, and most heavily promote their support for third-party open source offerings like the Linux operating system, the MySQL database, the FireFox web browser, the Eclipse integrated development environment (IDE), and more.

A recent study by Forrester, "Open Source Software's Expanding Role in The Enterprise" (provided from the Unisys website), shows that open source software use for mission-critical applications is expanding, and highlights some of the benefits users are seeing from open source software.

"Using open source BI means that customers and IT organizations will have to deal with software source code."

This is not true, although the assumption is somewhat understandable given that the core of the definition of "open source" software relates to the availability of software source code.

In reality, most organizations who are users of the software do not want to see or touch Pentaho's source code, and there is no reason for them to do so. Pentaho provides compiled, packaged, certified, installable versions of its software. Source code is publicly available as an optional download, but the source code is generally only accessed by members of the Pentaho Community who are interested in working with it to potentially enhance future versions of Pentaho.

Although most users/customers don't ever see the source code, they still benefit from the fact that it is publicly available. The availability of source code creates an "insurance policy", and reduces long-term customer risk. As proof of this, many mainstream IT organizations ask for "source code escrow" agreements with their proprietary software vendors. These agreements require that if the proprietary software vendor is acquired or becomes insolvent, that the customer has the right to obtain the source code so that they can avoid disruption of their IT environment. The Professional Open Source model provides this benefit as part of the standard offering, rather than as a negotiated add-on.