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The Business Case for BI: Now More Critical Than Ever

by Boris Evelson

for Business Process & Applications Professionals



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This is the first document in the “ROI Of BI” series.

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EXECUTIVE SUMMARY

Even as IT reduces or holds budgets steady in many enterprise software sectors, business intelligence (BI) initiatives remain front and center in most enterprise business and IT agendas. As the demand for pervasive and comprehensive BI applications increases, the complexity and cost of large enterprise BI implementations are not easily reduced. Therefore it is now more critical than ever to demonstrate tangible value from BI by building bulletproof BI business cases. However, challenges including the grey boundary lines around which processes and tools to include, multiple BI components that typically need to be customized and integrated, and frequent unpredictability of BI system integration efforts make BI business cases an effort not for the faint of heart. This first document in the “ROI Of BI” research series reviews the major categories of BI business cases, analyzes typical BI ROI components, and argues against building an all encompassing, enterprisewide “über-business case” for BI. Future documents in this series will provide in-depth BI ROI models based on Forrester Total Economic Impact™ (TEI) methodology.

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NOTES & RESOURCES

Forrester interviewed a number of vendors to contribute to this report, including Fujitsu, HCL Technologies, IBM Cognos, QlikTech, SAP Business Objects, SAS Institute, and Wipro.

Related Research Documents

[“Quantifying Technology Investment Risk”](#)
April 10, 2009

[“BI Belt Tightening In A Tough Economic Climate”](#)
February 20, 2009

[“The ROI Of Master Data Management”](#)
October 29, 2008

[“The Total Economic Impact™ Methodology: A Foundation For Sound Technology Investments”](#)
August 4, 2008

THE BULLETPROOF BI BUSINESS CASE: NOW MORE CRITICAL THAN EVER

In a recent conversation with a CIO of a large European financial services institution, Forrester asked how the bank missed the signs and indicators of the impending financial collapse of its portfolio — even though it had all of the necessary data at its disposal. “Yes, we had the data,” answered the CIO, “but we did not have the information.” Indeed, BI, the process that transforms data into information, or at least the right kind of BI, forms the foundation for why financial institutions and even entire nations got themselves into the current economic mess. BI also has the opportunity to be at the core of the processes of getting us back on track for recovery.

Indeed, BI initiatives continue to be front and center of most enterprise business and IT agendas, and BI-related activities keep on rising (see Figure 1).¹ Forrester witnesses this increase in BI activity firsthand through multiple client interactions, including inquiries, document readership, advisory, and consulting. Why the increase in BI activity? The commoditization of many products and services across industries represent one of the main catalysts for this upward BI trajectory. Improved insight and smarter and faster decisions continue to remain increasingly important competitive differentiators. Other key catalysts for this persistent and growing BI trend include:

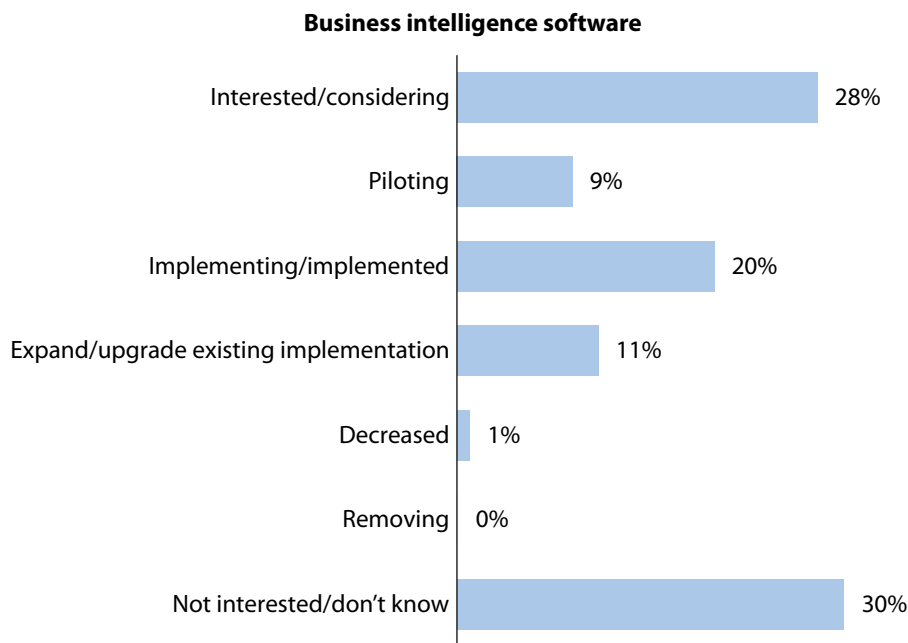
- **Increasing data and content volumes.** It’s not just that we generate large volumes of data in our transactional applications like enterprise resource planning (ERP) as well as from smart devices like utility meters and social media outlets like blogs and wikis, but we also replicate this data many times over. We replicate data for backup and disaster recovery, analytical applications (so that they do not interfere with the operational apps), and regulatory purposes such as the 30-year record retention requirement for US-based financial institutions. As a result, analysis that could be performed in spreadsheets or homegrown desktop-based BI applications a few years ago now requires petabyte-size data warehouses and industrial-strength BI applications.
- **Complex regulatory reporting requirements.** The number of regulations required to keep the increasingly complex global economy transparent to ensure legal compliance will continue to skyrocket. BI applications, reporting, and analytics are the key enablers to support regulatory requirements like Sarbanes-Oxley (SOX), BASEL II, and International Financial Reporting Standard (IFRS) in the financial services sector; the Health Insurance Portability and Accountability Act (HIPAA), and pay-for-performance in healthcare; and hydrocarbon accounting in oil and gas, transportation, and manufacturing industries. Like it or not, most enterprises have no choice but to comply and implement these tools.
- **Hunger for more insight about internal and external processes.** No one said it better than Walter Wriston, chairman of Citigroup in the 1980s, that: “information created from a financial transaction will be more valuable than the execution of the actual transaction itself.” Indeed, while a transaction occurs only once, the information about that transaction can be leveraged and reused numerous times in customer-facing processes such as sales and marketing activities

and in internal processes such as capacity, product, and resource planning. Once again, BI applications analyze the implications of every transaction, transaction aggregates, and patterns across multiple dimensions such as time, geography, product line, and customer segment, among others.

For many large enterprises, BI remains and will continue to be the “last frontier” of competitive differentiation. Unfortunately, as the demand for pervasive and comprehensive BI applications continues to increase, the complexity, cost, and effort of large-enterprise BI implementations increases as well. As a result, the great examples of successful BI implementations among Forrester’s clients are greatly outnumbered by the volume of underperforming BI environments (see Figure 2).

Figure 1 Continued Rise In The Interest In BI Applications

“What are your firm’s plans to implement or expand its use of the following information and knowledge management software technologies in the next 12 months?”

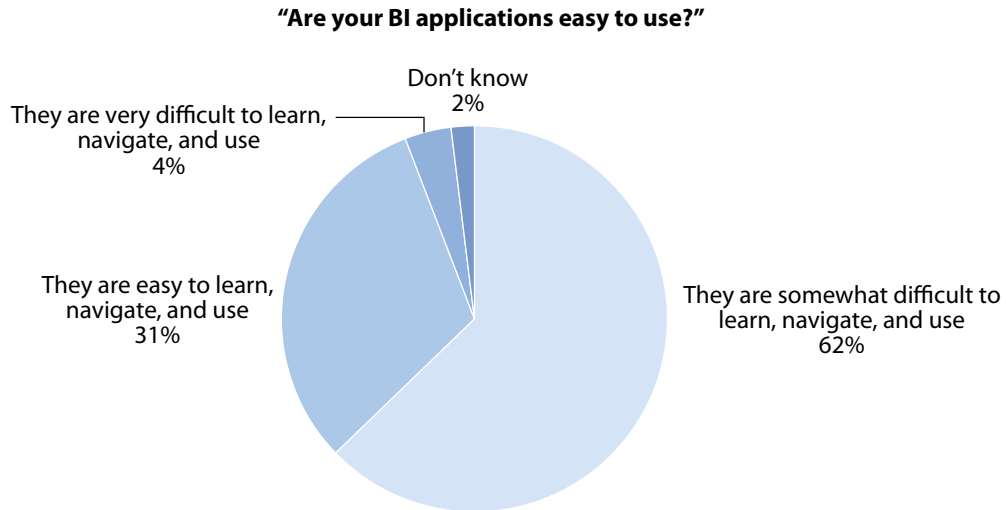


Base: 1,021 IT decision-makers
(percentages may not total 100 because of rounding)

Source: Enterprise And SMB Software Survey, North America And Europe, Q4 2008

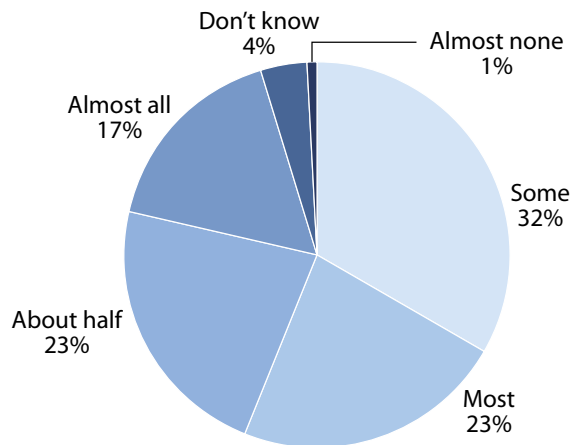
Figure 2 Typical Challenges In Numerous Large Enterprise BI Applications

2-1 End users continue to feel that their BI apps remain difficult to learn, navigate, and use



2-2 Not all relevant data is available in enterprise BI apps, so many end users revert back to homegrown apps such as spreadsheets

“What portion of the information you need to report on and analyze is available to and accessible from your BI applications?”



Base: 82 IT decision-makers
(percentages do not total 100 because of rounding)

Source: August 2008 Global BI And Data Management Online Survey

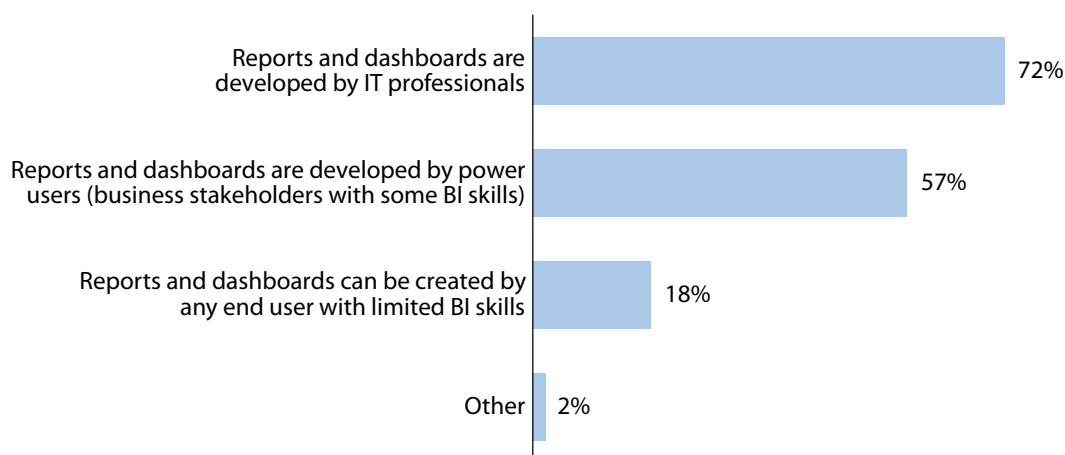
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Source: Forrester Research, Inc.

Figure 2 Typical Challenges In Numerous Large Enterprise BI Applications (Cont.)

2-3 IT still develops most BI apps; end user self-service remains elusive

“Who develops your BI applications? (select all that apply)”



Base: 82 IT decision-makers
(multiple responses accepted)

Source: August 2008 Global BI And Data Management Online Survey

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Source: Forrester Research, Inc.

While most CxOs intuitively understand the value of BI, there's a certain stigma associated with many expensive, mammoth-size BI and data warehousing (DW) projects from the 80s and 90s. These senior executives appropriately demand a solid demonstration of tangible BI value through a compelling BI business case before they agree to commit millions of dollars and significant enterprise resources for BI initiatives.

But Most BI Business Cases Are Tough To Build And Support

Before plunging into an all-encompassing, comprehensive, cross-functional, enterprisewide BI ROI business case — stop! A business case for BI is among the toughest to construct and support relative to most other enterprise software investments. A few reasons why:

- **Drawing boundaries between BI versus non-BI components is highly subjective.** Some cost components of a BI business case are clear, such as software licenses and development efforts to build data integration, data marts, reports and dashboard infrastructure, and the actual analytical application (such as customer, HR, or risk analytics). But what about data quality

and master data management (MDM)? These are highly critical components for a successful BI implementation (otherwise garbage in, garbage out), but are also critical to support data-centric operational processes like order management and customer service. And what about a portal? A portal represents the “last mile to the BI client,” without which BI reports cannot be effectively managed, organized, and delivered. But a portal is so much more than just a window into BI applications. Therefore, drawing a clear line around where pure BI components start and stop, and getting an ironclad key stakeholders’ agreement on these lines of demarcation are absolutely critical to building a successful BI business case.

- **Scoping, requirements, and usage patterns are difficult to estimate upfront.** BI planning is very analogous to the typical IT cliché of “build it and they will come.” Unlike many other enterprise applications, concise BI requirements only start pouring in after the initial prototype, proof of concept, or any other first deliverable is delivered to end users. That’s why BI does not work with the traditional software development life-cycle (SDLC) waterfall methodology. Instead, BI architects must implement more reactive, flexible, and adaptive agile development methods.² Agile approaches such as: 1) face-to-face business participation versus working with IT liaisons; 2) personal ad-hoc interactions versus defined processes, real-time prototypes versus specifications; and 3) reacting to change versus planning in advance, can do wonders for BI project and application success. But these agile approaches do not easily align with very specific line items in a BI business case.
- **Identifying the infinite variables that may contribute to business benefit is paralyzing.** While it is natural for people to point fingers at one another when something goes wrong in a project, it is equally natural for some stakeholders to claim their rights to a piece of BI success. Many IT or business BI project owners face challenges and disbelief when they claim a particular BI initiative is the major contributing factor to, say, increased revenues or reduced customer churn. For example, sales executives at the same company may claim that it was their improved sales techniques and better trained sales force that generated those achievements. Or economists in the organization instead point to direct correlation of these successes to external economic factors. Unless one constructs a highly comprehensive model taking into account hundreds of variables — which is generally impractical and a huge overkill — proving a direct and statistically supported correlation between improved BI and a particular top-line business benefit is quite tricky.

Based on all of these challenges, Forrester recommends the following approach to developing and building BI business cases: 1) organizing multiple BI business cases into distinct categories (see Figure 3 and see Figure 4); 2) prioritizing these business cases according to the degree of complexity and difficulty; 3) getting your feet wet with the simplest cases (such as automating a manual process); 4) accumulating lessons learned; and 5) then proceeding to more difficult cases involving top-line benefits and numerous direct and non-direct BI components.

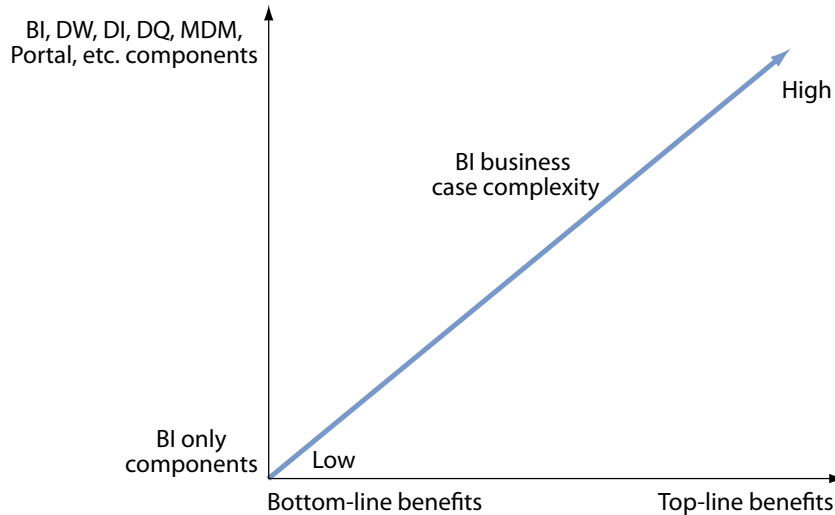
Figure 3 Categories Of BI Business Cases

Business case category	Contribute to bottom line	Contribute to top line	Components	Degree of difficulty to construct and prove	TEI model planned
Automating a manual process	x		BI	Low	Yes
Automating a manual process	x		DI, DW, BI, IW	Low to Medium	No
Instance consolidation	x		BI	Low	Yes
Major release upgrade	x		BI	Low	Yes
Vendor consolidation	x		BI	Low to Medium	Yes
BI applications for specific business purpose such as regulatory compliance	x		BI	Low to Medium	Yes
BI applications for specific business purpose such as regulatory compliance	x		DI, DW, BI, IW	Medium	No
Advanced BI, use case specific	x	x	BI	Medium	Yes
Advanced BI, use case-specific	x	x	DI, DW, BI, IW	Medium to High	No
BI as a profit center	x	x	DI, DW, BI, IW	Medium to High	Yes
Enterprise BI	x	x	DI, DW, BI, IW	High	No

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Source: Forrester Research, Inc.

Figure 4 BI Business Case Complexity



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Source: Forrester Research, Inc.

GET YOUR FEET WET WITH THE BI BUSINESS CASES TARGETING THE BOTTOM LINE

Forrester strongly recommends starting with BI business cases that affect mostly the bottom line: cost reduction, risk avoidance, operational efficiencies, redeployment of resources, or any other business value with the goal of improving profitability. Why? Bottom-line business cases are easier to build and support since they carry more tangible and quantifiable benefits such as cost reductions and productivity gains. While BI project sponsors can and should scrutinize the real dollar value of intangible benefits such as improved customer satisfaction, definitive bottom-line savings are more difficult to dismiss.

Start With A Business Case For Automating A Manual Process

Automating manual processes with a BI application is analogous to any operational application implementation such as enterprise resource planning (ERP) or customer relationship management (CRM), making it quite possibly one of the simplest BI business cases. A typical, hypothetical scenario goes like this: Company A's monthly financial consolidation and reporting process takes three full-time equivalents (FTEs) five business days per month. This includes two days to collect, integrate, and consolidate income statements and balance sheets from several lines of businesses (LOBs) and subsidiaries and three days to prepare and reconcile monthly statements. In this mostly manual process, LOB data is transmitted by email and consolidated and reported on using spreadsheets.

This business case recommends replacing the manual process with: 1) an automated extract, transform, load (ETL) process to collect, standardize, and consolidate data from spreadsheets; 2) a financial reporting datamart to store and aggregate LOB data; and 3) automated report generation tools and process. This solution enables Company A to reduce the five-day monthly cycle to two days and requires only one FTE to run the new process. A fifteen person/day effort is now reduced to two person/day effort, two FTEs can now be redeployed or right-sized, and one FTE can take on additional duties for three days per month (see Figure 5).

Many of Forrester’s clients have re-engineered a formerly manual process and automated data collection, cleansing, reconciliation, consolidation, and reporting components. These clients manage to reduce their quarterly financial consolidation and closing process from weeks to days, significantly decrease reporting errors, and redeploy tens of business and IT FTEs to other responsibilities.

Benefits aside, do not assume that your business case is free from risk. Build into your business cases model allowances for multiple project risks associated with any technology investments. From an implementation perspective, common risks typically include those associated with technology implementation, vendor selection, and budget definition. From an impact perspective, the risk factors that could potentially affect the original variables used to construct the benefit estimates could also include cultural barriers, lack of management support, and external market risks.³ Include these risk potentials not just in the benefits — risk avoidance, but in the potential costs categories as well.

Figure 5 Automating A Manual Process — BI Costs And Benefits

Typical costs		Typical benefits	
Direct	Indirect	Tangible	Intangible
Software: • Data integration • DBMS • OLAP • BI Hardware FTEs Consulting services Related processes (PMO, governance, change management, training)	Software and services for: • Portal • Collaboration Project and technology risks	• Staff reduction • Leveraging infrastructure in other BI initiatives • Staff redeployment	• Increased reporting accuracy • More timely reporting • Less reliance on IT • Productivity gains • Improved decision-making • Agility – ability to react faster to business and regulatory changes Risk avoidance: • Compliance • Operational risk

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Source: Forrester Research, Inc.

Short-List Your BI Business Case For Instance And Vendor Consolidation

Many large enterprises have built, improved, and expanded their BI infrastructure and applications for close to 20 years. These large enterprises are often global, have integrated multiple mergers and acquisitions, and experienced years of varying requirements and priorities across LOB. The resulting BI environment is filled with numerous redundant and overlapping BI applications leveraging multiple vendors. BI professionals within an organization such as this should target their business case to streamline these BI environments by first consolidating multiple instances of BI servers and then selecting and standardizing on a single BI vendor platform (see Figure 6). To get started:

- 1. Start with consolidating multiple instances within the same BI product.** Many firms support multiple implementations of the same BI tool but allow each LOB, functional group, or geographic region to manage its own siloed IT support and negotiate separate contracts with the same vendor. Consolidate both the physical implementation of these BI products, as well as a contracts and organizational structures. Work with your sourcing and procurement teams to renegotiate the terms across the disparate contracts into a single enterprise contract — which can often lead to larger discounts based on larger user base and an increased number of total licenses. From an organizational standpoint, consider adopting a shared service IT model that can pool your skilled IT development resources to support all users of the tool across the organization. Once disparate instances of the same BI tool have been completed, which mostly involves capacity and support planning, BI pros can then consolidate applications across multiple BI vendor platforms — a much more complex process requiring application rewrite, staff retraining, and more significant change management.⁴
- 2. Create a decision tree to determine what tools to use in what circumstances.** In most large, global enterprises, it is impractical to expect an ultimate goal of standardizing on a single BI platform. Instead, BI professionals working in these complex organizations must create a decision tree to determine which BI tools are best suited to meet specific end user use cases and requirements. In fact, Forrester recently implemented a BI decision tree for a large regional US bank to provide guidance on which BI tools to eliminate completely and which to use under specific circumstances. Keep in mind that there are many BI tools on the market that offer unique and differentiated capabilities, and ending up with a few select BI tools that fit unique business requirements is quite practical. Just ensure that your underlying data management infrastructure is clean: all data moves through the same logical pipe of integration and transformation logic, and you centrally define and govern your key metrics, measures, and indicators. Overlaying several special-purpose BI tools on top of a trusted data management infrastructure can in fact put you far ahead of many of your peers and competitors.
- 3. Select the strategic BI platform and start consolidating applications.** If most of your BI business requirements can be addressed by a single vendor, then also make sure you are organizationally and culturally ready to standardize on a single BI platform. Selecting a single

BI platform is not an easy task for multiple reasons, including significant investments not just in software, but in custom application development, training, and change management. Forrester recommends a methodical approach of first aligning BI technical architecture requirements with other enterprise software standards, and then mapping functional requirements against each vendor capabilities using our Forrester Wave methodology (see Figure 7).⁵ Such an approach may seem a bit counterintuitive compared with a more orthodox method of putting functional requirements first. But the fact of the matter is that a number of the leading BI vendors these days do have function-rich, scalable, and robust BI platforms capable of supporting most large enterprise BI requirements.⁶

Figure 6 Instance And/Or Vendor Consolidation — BI Costs And Benefits

Typical costs		Typical benefits	
Direct	Indirect	Tangible	Intangible
<ul style="list-style-type: none"> • Additional hardware, software costs for centralized infrastructure • FTEs and consulting services to perform project planning and migration • Related processes (PMO, change management, retraining) 	<ul style="list-style-type: none"> • FTE redeployment, retraining • Project and technology risks • Data governance efforts to reconcile conflicting definitions and rules across disparate BI environments 	<ul style="list-style-type: none"> • Reduced server costs • Reduced BI license and annual maintenance fees • Support and development staff reduction • Leveraging centralized infrastructure in other BI initiatives • Staff redeployment 	<ul style="list-style-type: none"> • Less reliance on IT • Productivity and efficiency gains • Server redeployment • Risk avoidance <ul style="list-style-type: none"> • Operational risk

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Source: Forrester Research, Inc.

Figure 7 Forrester BI Vendor Selection Approach

Consideration	Decision	Vendors
1. Software stack	Is there a mandate in your organization to move toward a single software and application stack?	Consider IBM, Microsoft, Oracle, or SAP.
2. BI stack	Do you place high value on using data integration and BI components from a single vendor?	Consider all of the above, plus Information Builders and SAS.
3. BPS	Do you place high value on using business performance solutions (BPS) and BI components from a single vendor?	Consider IBM, Microsoft, Oracle, SAP, and SAS.
4. Other requirements	What are the specific BI requirements across the enterprise for different departments, lines of business, and user types?	Consider all of the above, plus Actuate and MicroStrategy.

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Source: Forrester Research, Inc.

Business Cases For A Major Release Upgrade Vary By Vendor

Vendors love to have their customers migrate to the latest product releases. While the benefits of an upgrade are obvious benefits for the vendors, their clients must bear the brunt of often significant upgrade costs. Unfortunately, upgrade processes for many of the leading BI vendors’ major releases are far from automated. In worst cases such an upgrade may require a full application rewrite, some often require a significant staff retraining, and at minimum — a full regression testing effort (see Figure 8).

There are often very specific and tangible benefits of an upgrade beyond the typical, vendor marketing spin such as “more modern architecture” and “improved support” (see Figure 9). In some cases an upgrade consolidates multiple products onto a single platform, which can reduce development, support and administration requirements. In other cases an upgrade eliminates the need for third-party software to fill in functionality gaps. For example, MicroStrategy recently added multisourcing functionality in their Release 9 that allows for heterogeneous joins across multiple databases, eliminating the need for third-party data federation (EII) software. In another example, several BI vendors such as IBM Cognos, SAP Business Objects, TIBCO Spotfire, Information Builders, and Microsoft now offer integrated advanced analytics products (statistical analysis, predictive modeling, etc.), eliminating the need to purchase and maintain separate advanced analytics software tools. Also, newer BI product releases often allow for increased end user self-service, reducing reliance on IT — a nirvana for both business and IT stakeholders.

Figure 8 Major Release Upgrade — BI Costs And Benefits

Typical costs		Typical benefits	
Direct	Indirect	Tangible	Intangible
<ul style="list-style-type: none"> • Additional hardware, software costs for upgraded infrastructure • FTEs and consulting services to perform project planning and upgrade/migration • Related processes (PMO, change management, retraining) 	<ul style="list-style-type: none"> • FTE redeployment, retraining • Project and technology risks 	<ul style="list-style-type: none"> • Support and development staff reduction • Eliminate third-party software • Reduced server costs by deploying more users and applications on the same platform, leveraging more modern architecture • Staff redeployment 	<ul style="list-style-type: none"> • Less reliance on IT • Productivity and efficiency gains • More stable infrastructure • Better vendor support • Risk avoidance <ul style="list-style-type: none"> • Operational risk

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Source: Forrester Research, Inc.

Figure 9 Beneficial Features Of BI Vendors' Latest Releases

Benefit	Representative vendor/release
<ul style="list-style-type: none"> • Combine multiple data sources. Eliminate the need for separate data federation/virtualization software. • Integrated statistical analysis, predictive modeling. Eliminate the need for separate advanced analytics software. • Seamless offline/disconnected report usage. Eliminate the need for custom desktop synchronization processes. • Brochure quality reporting – no need for separate publishing software. • Single BI platform to support vs. separate reporting, ad hoc querying, OLAP, and dashboard products. • Enable more end user self-service with text-to-query and guided search capabilities. • Direct connectivity to ERP sources. Eliminate the need for third-party connectivity software. 	<ul style="list-style-type: none"> • MicroStrategy 9 • SAP Business Objects XI R3, IBM Cognos 8.4, Information Builders 7, TIBCO Spotfire 3.0, Microsoft SQLServer 2008, Oracle BI Enterprise Edition 10.1.3.4 • Information Builders 7 • Actuate 10, MicroStrategy 9 • SAP Business Objects XI R3, Cognos 8.4, Oracle BI Enterprise Edition 10.1.3.4 • SAP Business Objects XI R3, IBM Cognos 8.4, Information Builders 7, Oracle BI Enterprise Edition 10.1.3.4 • TIBCO Spotfire 3.0

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Source: Forrester Research, Inc.

BUSINESS CASE DEVELOPMENT MUST EVOLVE IN VALUE DELIVERED OVER MANY PHASES

When and if you feel comfortable that you've successfully built and supported bottom-line, cost savings, cost avoidance-type business cases and have established your credibility with the business owners, then you are ready to proceed to the next level.

Graduate To Application-Specific BI Business Cases

The next logical step is to build a business case to justify specific-purpose BI applications, such as regulatory reporting, supply chain or inventory analytics, customer and product profitability, and many others. However, most often these efforts are not so much about building new BI applications, since most financial software packages already include regulatory and compliance reporting components, and many large enterprise ERP software packages come with built-in customer, supply chain, HR, inventory, and other pre-built reporting and analytical applications. The majority of the effort that needs to be analyzed and justified for costs and benefits is really much more about data integration, data quality, master data management, and other critical components needed to bring customer, product, and transactional data together.

In many cases, the pure BI component of such consolidated applications is mostly about moving to a single BI platform — and is therefore, very analogous to the BI vendor consolidation effort and business case. In some instances, when the reporting functionality and UI of the ERP reporting application is inadequate, a new BI application, and the business case for it, needs to be built, and the business case is quite similar to the one for automating a manual process (see Figure 10).

Figure 10 Application-Specific BI — Costs And Benefits

Typical costs		Typical benefits	
Direct	Indirect	Tangible	Intangible
<ul style="list-style-type: none"> • Software <ul style="list-style-type: none"> • Data integration • DBMS • OLAP • BI • Hardware • FTEs • Consulting services • Related processes (PMO, governance, change management, training) 	<ul style="list-style-type: none"> • Software and services for <ul style="list-style-type: none"> • Portal • Collaboration • Project and technology risks • Data governance efforts to reconcile conflicting definitions and rules across disparate BI environments 	<ul style="list-style-type: none"> • Specific top-line benefits* • Staff reduction • Leveraging infrastructure in other BI initiatives • Regulatory compliance • Staff redeployment 	<ul style="list-style-type: none"> • Consolidated reporting • Increased reporting accuracy • More timely reporting • Less reliance on IT • Productivity gains • Improved decision-making • Agility – ability to react faster to business and regulatory changes • Risk avoidance: <ul style="list-style-type: none"> • Compliance • Operational risk

*More specific top-line benefits are in Figure 11

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Source: Forrester Research, Inc.

Proceed Cautiously To Build Business Cases For Top Line Benefits

For organizations that have successfully delivered incremental BI value through multiple low-hanging fruit business cases, such as automating manual processes, it's time to tackle the final frontier: top-line benefits that can enable increased revenue and market share. For example, a Forrester client recently replaced relatively basic customer analytics, mostly based on simple demographics, with advanced BI applications. These applications required several components including 1) MDM and data quality processes to trusted data sets; 2) data enrichment with customer psychographics such as prior buying behavior; and 3) advanced analytics to produce predictive models for future projected customer behavior under various conditions. These advanced applications are often used with relative success in revenue-generating activities (e.g., marketing campaign management) and for revenue loss avoidance initiatives (e.g., improved customer satisfaction, improved customer retention, and reduced churn).

But unlike business cases that target bottom-line improvements, the benefits of advanced BI applications are harder to predict and defend because:

- **Revenue increase is often beyond the control of a single application or process.** Unlike cost-cutting measures, efficiency and productivity gains that are mostly within the realm of your sphere of influence and control, revenue growth depends on multiple factors, including economic and regulatory conditions, which are often beyond your immediate control.

- **Few Forrester clients are willing to share their BI success stories.** It's nearly impossible to identify a public reference for a BI success story based on top-line benefits realized through advanced BI applications. The reason for this is simple. If you strike gold, would you share its location with anyone? If you figure out a better way to sell your products and services, why would you share that competitive advantage with the world? Indeed, a quick examination of top BI vendor Web sites reveals cost savings and efficiency gains as the primary customer success stories compared to a miniscule number of customers willing to share their BI based top line benefits. The only practical approach is to seek such references under non-disclosure agreement (NDA) and from peers in non-competing market segments (see Figure 11).

Figure 11 Typical Top-Line BI Benefits From Several Representative Industries

Industry	Typical top-line benefits
Retail, telecommunications	<ul style="list-style-type: none"> • BI as a profit center, selling POS analytics to manufacturers, wholesalers, and distributors. • Enhanced store layout and display, pricing and merchandizing planning effectiveness resulting in improved sales and increased market share.
Financial services, retail, telecommunications, healthcare, service, gaming, travel and hospitality	Revenue retention via improved customer satisfaction resulting in improved customer retention, reduced churn, increased market share.
Financial services, retail, telecommunications, manufacturing, CPG, gaming, media, travel and hospitality, high-tech, publishing, education	Enhanced sales and marketing campaign effectiveness, improved cross-sell and upsell ratios, increased market share.
Healthcare providers	Improved billing and insurance payment collections.
Financial services, retail, telecommunications, service, travel	Improved collections.
All	Improved customer, product, project and service line profitability.
Public sector	Improved citizens service and satisfaction.*
Nonprofit	Improved fundraising effectiveness.

*Equivalent to top-line benefits in the public sector, since improved citizens service and satisfaction often result in increased funding for BI related initiatives.

And as a last step in the BI journey, consider a business case for BI as its own profit center. Some companies, especially retailers that have mountains of point of sale (POS) data are experimenting with selling analytical applications to their partners, such as manufacturers, suppliers, wholesalers, and distributors. These retailers package their POS data at a certain level of aggregation — to protect partner confidentiality — create analytical POS data warehouses, and sell access to the POS analytics to their partners for a subscription fee. It’s a win-win scenario where partners benefit by understanding how all products — theirs and their competitors’ — in a particular product line are performing, and the retailer gets an additional revenues stream. Needless to say, such an endeavor should be considered and the business case for it built only after your internal BI house is in order, so that you do not risk exposing your dirty data, unstable architecture, or runaway costs to the outside world.

In summary, to improve your chances of building a successful BI business case for both top- and bottom-line BI benefits, proceed as follows (see Figure 12).

Figure 12 BI Business Case Road Map

When to do it	BI business case type	Attempt if you BI maturity level is
When you need to build up your experience and credibility with building BI business cases and proving BI ROI.	Bottom-line benefits based on reporting and analytics only.	Low
	Bottom-line benefits based on end-to-end BI components, including data integration, data warehouse, portal, etc.	
After you have built up your BI business case expertise and BI bottom-line ROI has been proven.	Top-line benefits based on reporting and analytics components only	High
	Top-line benefits based on end-to-end BI components, including data integration, data warehouse, portal, etc.	
When you have your internal BI architecture, processes, data, organization, governance and ROI in order.	BI as a profit center.	Very high

RECOMMENDATIONS

SIMPLIFY YOUR BI BUSINESS CASES BEFORE YOU START

In addition to our major recommendation to proceed cautiously from bottom-line BI business cases that support a very specific initiative to more cross-functional business cases with tangible top-line benefits, business process and applications and information and knowledge management professionals should further simplify these business cases (and their jobs) as follows:

- **Cut, and cut, and cut again before you migrate or upgrade.** Forrester finds that a considerable number of our clients pay for many BI features and objects that are not used. Furthermore, many Forrester clients find, after a simple analysis, that multiple reports perform exactly the same function. Before you start building a business case, run usage analytics on your BI environment to see what is being used and by whom, when, and how. In some instances, you may choose to just turn off some features and see if anyone screams. Demand that your preferred systems integrator (who you may be considering for the migration or upgrade services) perform at least part of such an analysis as part of their presales activity. Your business case will look a lot more attractive after such a simple exercise.
- **Don't overlook the fact that you may require more than one BI tool upgrade.** Single-stack, best-of-breed components and business requirements should be the main drivers for your strategic BI platform decision. But cost and effort associated with upgrades could be a major component in the long-term cost of ownership. Remember, the average enterprise software life cycle is seven to 10 years, and BI vendors typically announce a major release once every two to three years — so you may end up doing two or three major upgrades during the lifetime of your BI application.⁷
- **Consider vendor upgrade history as part of your strategic BI direction decision.** If you are lucky, you may be dealing with a vendor that grows mostly organically, making their major release upgrades for you as painless as possible. But this is a rarity today, especially among the largest BI vendors. Therefore, at the very least, if you have to go through a significant upgrade effort once, try to get the vendor commitment to isolate you from similar efforts in the future. If they position themselves as your “partner,” remind them that true partners share risk and costs, not just benefits. Do your best to minimize the need for your business case costs category to include more than one major upgrade effort over the lifetime of the software.
- **Do not even think of building a large, all-encompassing enterprise BI business case.** Starting an enterprisewide BI initiative from scratch or re-architecting and modernizing one is a multiyear, multimillion dollar effort. In addition to all of the reasons described earlier in this document that an “über-business case” may be impractical, you will also inevitably get a push back from some business executive who will ask “if I invest n millions of dollars to acquire a competitor, or develop a new product, the ROI on that initiative is very clear — so why should I invest dollars in BI, if the benefits are mostly long-term and intangible?” The

true value of enterprise BI, as just one of the many factors contributing to company success, can only be shown over the long term. Until corporate boards start restructuring incentive compensations to reward long-term company growth versus Short-term revenue or stock price boost, enterprisewide BI business cases should not be attempted. For now, stick with business cases for specific applications or components like MDM or data quality with very clear and tangible ROI.⁸

SUPPLEMENTAL MATERIAL

Companies Interviewed For This Document

Fujitsu

HCL Technologies

IBM Cognos

QlikTech

SAP Business Objects

SAS

Wipro

ENDNOTES

- ¹ US IT budgetary spending will fall in 2009 by 2% as the recession takes its toll on US businesses and governments. Contrary to past experience, small and medium-size business (SMB) IT spending will decline more than enterprise IT spending as SMBs bear more of the pain from the housing sector collapse and the financial crisis. The largest sectors of the US tech market continue to be service industries like professional services, governments, healthcare and education, and financial services, with the first three industries experiencing positive IT budget growth. The biggest declines in 2009 will be in manufacturing and retail, affecting SMBs and enterprises equally. However, these are relatively small parts of the US tech market. The best opportunities for IT vendors in 2009 will be with enterprises providing professional services, federal and selected state governments, healthcare, education, large utilities, and telecom firms. See the May 7, 2009, "[US Enterprise Versus SMB IT Budgets In 2009](#)" report.
- ² Agile development practices continue to spread across development functions in technology companies. When technology companies adopt Agile practices in the development organization, these changes have ripple effects on other departments whose work is tied to the development cycle — such as QA, product management, marketing, sales, support, consulting, and business development. As our survey of technology companies shows, Agile can inspire improvements in how technology companies operate, even if they don't pay much attention to the effect on relationships between development teams and the rest of the organization. To reach the full potential of Agile and to avoid the potential pitfalls of these unintended consequences, companies need more conscious, dedicated efforts around the adoption of Agile across product-related functions. See the May 6, 2009, "[From Agile Development To Agile Engagement](#)" report.

- ³ The process of risk measurement has been confounding decision-makers within IT for some time, resulting in the use of weak qualitative analysis that only loosely ties to project outcomes. But using the basic financial community equivalency of “risk equals uncertainty” can help IT leaders translate the uncertainty that risk creates directly into the potential return on an investment. The power of these models lies in their ability not only to quickly yet accurately measure the impact of risk but also to communicate that impact to the rest of the organization. The result? Increased credibility and better risk management. See the April 10, 2009, “[Quantifying Technology Investment Risk](#)” report.
- ⁴ A Total Economic Impact™ (TEI) analysis shows that a reduction from three instances to one is likely to produce a significant return on investment (ROI) of 133.32% over 10 years, while consolidations from 10 instances to one can produce a staggering ROI of up to 379.91%. See the May 16, 2008, “[The ROI Of Packaged Apps Instance Consolidation](#)” report.
- ⁵ As an economic downturn becomes a sobering reality, enterprises look for various ways to increase revenues and reduce costs. While overall IT budgets become targets for cost cutting, business intelligence (BI) applications and infrastructure need not fall into the same category. Smart information and knowledge management (I&KM) professionals are leveraging BI as a corporate asset to continue to survive, compete, and thrive — even in tough economic times. Therefore, rather than implementing BI cuts across the board, Forrester recommends that I&KM pros use a more targeted approach of BI consolidation and optimization, as well as an evaluation to see if lower-cost technology alternatives are right for you. These approaches can enable you to do more with less, leading to a win-win scenario that can contribute to both your top and bottom lines. See the February 20, 2009, “[BI Belt Tightening In A Tough Economic Climate](#)” report.
- ⁶ In Forrester’s 151-criteria evaluation of enterprise business intelligence (BI) platform vendors, we found that IBM Cognos and SAP Business Objects maintain their leadership positions, while Oracle and SAS Institute move into leadership positions in enterprise BI thanks to the richness of their functionality, ability to scale, and the completeness of their corporate and product vision and strategy. See the July 31, 2008, “[The Forrester Wave™: Enterprise Business Intelligence Platforms, Q3 2008](#)” report.
- ⁷ Of all the assets that an enterprise acquires, enterprise software brings with it the most unusual, onerous, and restrictive set of constraints. In most cases, licensees may not resell, reuse, or share their license. Licensees often encounter numerous grievances across the software ownership life cycle from selection to implementation, utilization, maintenance, and retirement. Poor economic conditions have kept vendors from raising prices for now; however, rapid vendor consolidation has eliminated choice and customer leverage in the market. Upon economic recovery, enterprises can expect price increases in software categories where only a handful of solution providers compete. Fortunately, advances in new deployment options (e.g., software-as-a-service, platform-as-a-service, cloud computing, managed services, and virtualization) may slowly shift the pendulum in favor of the customer. See the July 7, 2009, “[An Enterprise Software Licensee’s Bill Of Rights, V2](#)” report.
- ⁸ A Total Economic Impact™ (TEI) analysis of a typical first-phase MDM project indicates that it is likely to produce a small positive return on investment (ROI) of 7% and almost \$217,000 dollars in positive business benefits in a traditional large enterprise over three years, with more significant return realized over the longer term. See the October 29, 2008, “[The ROI Of Master Data Management](#)” report.

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