

What is bi?

Making Business Intelligence Work For You
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What is Business Intelligence?

All enterprises strive to achieve operational efficiencies and increased profitability. This requires that people in decision-making positions have the insight to manage and optimize critical business processes. Converting huge amounts of raw data into valuable information that can be analyzed to gain insight into the intricate workings of a business, leading to solving problems quickly, and capitalizing on opportunities more fully, is what Business Intelligence (BI) is all about

BI solutions include application programs and technologies for gathering, storing, analyzing and providing access to data to help enterprise users make better business decisions. They can be valuable in analyzing the effectiveness of ongoing operations and special projects alike.

META Group stated that the main objectives sought by businesses when implementing BI were:

- Better service quality
- More efficient decision making
- Cost reduction
- Better informed planning, forecasting and budgeting
- The ability to analyze historical data
- Quality management
- Increased revenues and profit

The Value of BI

BI solutions combine data from multiple sources in an automated, scheduled process. This saves time and effort and delivers the information needed to make critical decisions and changes. However, a significant value of BI is derived through gaining competitive advantage by making better decisions, faster. Also, understanding business processes has significant intrinsic value – even if effective decision-making may take some time to develop.

BI tools

There are several types of BI tools in the marketplace. We will discuss the three you are most likely to encounter:

Portals provide a starting point for enterprise and workgroup information stored on a company's intranet. They can act as a launching point for applications such as Customer Relationship Management (CRM), Financials, Enterprise Resource Planning (ERP), Computerized Maintenance Management Systems (CMMS) and email. Portals are primarily comprised of unstructured data.

Analytic Dashboards offer a subset of portal functionality geared to measure and display current corporate performance and enable in-depth performance analysis. Dashboards provide this functionality through multi-tiered, guided analysis. KPIs (Key Performance Indicators) visually report the current state of the business measured over a specified period – and compare that current state to specified goals.

Scorecards are applications or data interfaces that present an organization's or group's strategic goals and visually display progress against these goals. The average or median measurements of execution and progress are based over longer time periods such as weeks, months, or the current year. The goals represented in scorecards are based on the organization's strategic planning and measured against internal or industry standards and benchmarks.

BI Implementation

Executive Mandate: Implementing BI solutions that work and deliver the most value for your investment requires commitment from top management and a skilled and experienced team dedicated to the project. Every BI project must start with a clear and continuously reinforced executive mandate and sponsorship that communicate to everyone involved that the BI initiative is important and his or her cooperation is expected.

User Acceptance: To ensure success of the BI initiative in any organization, it is imperative that the first thing that the implementation team accomplishes is gaining the trust and understanding of the users to ensure their acceptance and wide use of the solution. Because users are likely to be skeptical of new information sources, it is important to make them understand where the information comes from and how to access that information. Provide plenty of opportunities for discussion, for voicing of opinions and concerns. Compromise when necessary to keep the project moving forward

Accuracy and Correctness of Data: For users to trust a BI solution, they will have to be confident about the accuracy and correctness of its information. The users will gain confidence in the BI solution if the implementation team were to demonstrate that the

information in the BI solution ties directly back to the source system and consistently reflects the source data or is calculated using source data.

Correctness is a function of business rules. It is information that is modified or presented in some agreed upon fashion. Because there can be several business rules for a single bit of information, trust in these values can be considerably more difficult to gain.

Identify and Define KPIs: Next task will be to identify the KPIs that are truly important and the single trusted definition of those KPIs. This should be a technical working session as well as a business process and requires business users to participate. Try to gain a consensus. If you come to an impasse, refer to an arbitration group; making the decision of that objective authority the final word. This group should have a good understanding of BI concepts as well as corporate goals.

Ensure Data Integrity: Once you have a clear understanding of which KPIs are important and how those KPIs will be calculated for presentation, you have to gauge the current quality of your data as well as plan for maintaining or improving its quality in the future. Your data need not be perfect in order for a BI solution to produce valuable information. On the other hand, it can't be critically flawed either. Knowing how much of your data is questionable is important as this goes directly to the question of user trust. Encourage you users to adopt the concept of continuous data improvement.

Make it Usable for Everyone: Deliver a viable solution with an easy user interface. Give some real thought to your tool selection and interface design. One size will not fit all in your BI solution's interface. Your users will likely be divided into three primary groups: power analysts, information analysts and information consumers. Each group has its own requirements and objectives for your solution and you should tailor your interface as much as possible to meet their needs.

Power Analysts need the least support and interface refinement. Build the BI solution, point the tool at it and they are ready to go. You should expect the bulk of the demands from this group to be for additional new data or new calculations.

Information Analysts will need a bit more attention given to their interface. These users will want to navigate through the BI solution to a certain degree but will typically be looking to analyze the same values over time.

Information Consumers will probably be the largest group in your organization. The members of this group will use your BI solution with standardized views of data with a minimum of navigation. The interface for Information Consumers must be simple, concise and static. Changes to this group's user interface can be very disturbing, so plan carefully and communicate thoroughly during the rollout of material changes.

Train and Support users: Across all of these user communities, training, and equally important, follow-on support of users, are critical components in delivering a successful BI solution. Plan to provide formal training sessions periodically to facilitate an overall understanding of the data, the system and how to navigate to the information of interest. You should also plan for follow-on support in the form of one-on-one sessions with users as they learn how to best take advantage of their BI tools.

Develop a Sense of Ownership: At every step of this process you should be acting as a team. Building relationships and a sense of ownership in the outcome is essential to your success.

Demonstrating the benefits

Though BI implementation may require a substantial investment for an organization, it can also deliver substantial measurable benefits. Value accrued through quantitative and qualitative benefits range from increased business performance to reduced operations costs and improved customer relations. Once a BI solution becomes widely accepted in an organization, it is considered a critical factor in the business' plan for success and survival in a highly competitive market.

Key Benefits derived from a BI solution include:

- Gain insight into your business
- Help sharpen your competitive edge with smarter, faster decision making
- Help each employee drive the success of your business

BI gives you and your employees a targeted view of your business that allows for clear overviews and quick comparisons whenever they are required. You can instantly spot trends and identify weak spots to take immediate action. Because your colleagues can access all of the analytical views, you can share your insights and strengthen your arguments for a plan of action.

Looking Ahead

Business executives must quickly take advantage of changing conditions with new products and services. To accomplish these somewhat elusive goals, companies must constantly improve their abilities to identify, classify and intelligently analyze available information. However, a company's enterprise-information assets are squirreled away in many application silos. The goal of BI solutions is to turn these individually useful data resources into information that lets business managers immediately grasp the dynamic state of their business.

The need to act upon information is a key driver of BI applications. Folding business intelligence back into the business decision-making process, operational systems, or human interaction is the primary way to make sure that an organization can respond appropriately to changes in customer and market conditions. To bring about this

organizational dynamic, the analytic results must be available to all of the people within an enterprise. Traditionally, a lot of information gleaned from a company's business-intelligence tools made its way to upper management, but it didn't percolate quickly down into the trenches where it could be acted upon by the rank and file. Therefore, if BI were to be more widely used across the enterprise, people must be able to act upon it in a timely fashion and fold the information back into the business processes. Critical information about the state of the business must be distributed quickly, efficiently and appropriately to those people and departments that can affect the company's adaptability.

Companies should avoid implementing traditional BI solutions and look toward solutions that deliver analytics at the point of a business process. This type of analysis results directly in a modification of the business processes. The trick is to incorporate this intelligence into both tactical and strategic decision-making with managers making real-time decisions. Today's BI solutions must also be able to develop predictive models that are appropriate to the task, highly customized to specific business conditions, and targeted to address specific areas of interest or answer particular questions. Rather than just having high-end modeling at one end of the spectrum and static reports at the other, what are needed are analytics and analytic applications that watch for change and initiate actions at both an individual and a group level. Analytics are most useful when the application proactively lets the right people know when relevant business factors change. Change is the major concern of business. What's needed is BI tied to sensors and thresholds that can alert managers to the slightest nuance of change.

Another way BI tools are evolving is in interactive analytics, in which users are able to slice and dice data and also carryout what-if scenarios. Instead of driving the enterprise by looking in the rearview mirror, you're looking forward to what might happen and can strategize on how to reach that outcome. The ultimate payoff of your BI solution will be a system that can process diverse business data, draw conclusions and alert managers to proposed actions and outcomes. The impact on your business will be an organization that is more agile and better informed about all the conditions both within and outside your corporate boundaries.