



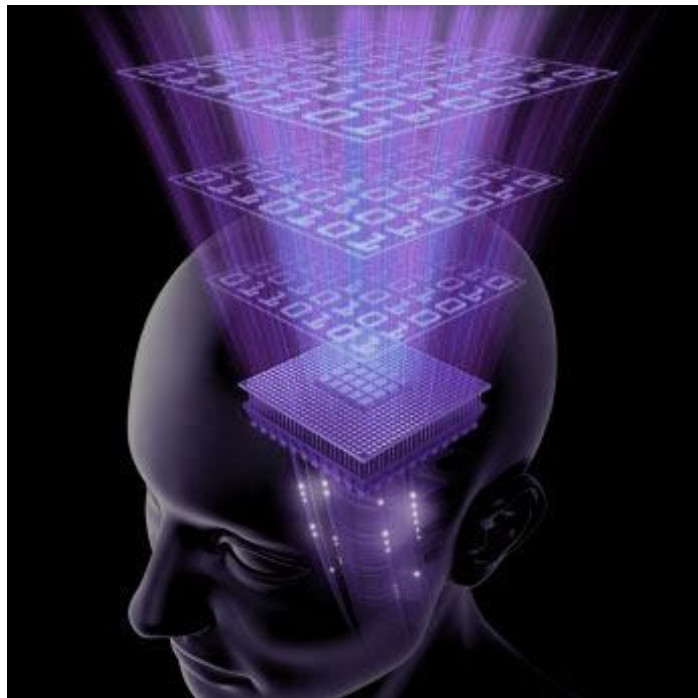
Wizertech Informatics Pvt. Ltd.

Your End-to-End IT Solution Partner

How "Business Intelligent" are you....?

*Use of Information and
Technology To Greater
Business Effectiveness*

16th – 30th June 2011



'Where should we as a company be in x Years?' or 'What are the strategic risks and opportunities facing us?'

If these questions have cropped up in your vision assessments for the organization, maybe what we actually need to address is – how Business Intelligence (BI) can help analyze the available data and predict the path ahead.

For optimal decision-making, an organization's executives must ensure that its business and management processes are supported with useful, actionable information. In providing this decision support, business intelligence (BI) is a key technology that enables organizations to understand and act on the information they receive from and store in various sources. BI has wide applicability for most aspects of business, including finance, sales and marketing, customer service, human resources and operations.

So, what is Business Intelligence?

Business intelligence (BI) refers to computer-based techniques used in identifying, extracting and analyzing business data, such as sales revenue by products and/or departments, or by associated costs and incomes. The term Business Intelligence was first coined by an IBM researcher, Hans Peter Luhn, in 1958 as "the ability to apprehend the interrelationships of presented facts in such a way as to guide action towards a desired goal."

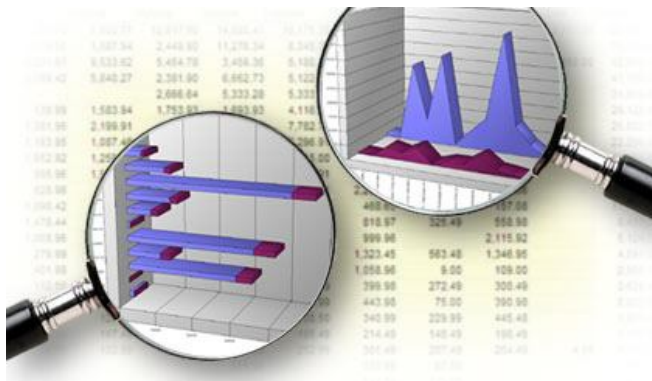
The early days of Business Intelligence constituted gathering information on the ground, extrapolate the facts and figures in an attempt to predict an organization's competitive edge.... for the rest part, the analysts depended on intuitive predictions. With no safety net in terms of the variability of these projections, business decisions could go dreadfully awry. Business intelligence as it is understood today is said to have evolved from the Decision Support Systems (DSS) which began in the 1960s and developed throughout the mid-80s. In 1989 Howard Dresner (later a Gartner Group analyst) proposed business intelligence as an umbrella term to describe concepts and methods to improve business decision making by using fact-based support systems. It was not until the late 1990s that this usage was widespread.

Somehow, the most cumulative definition of Business Intelligence would be: "**..... a set of methodologies, processes, architectures, and technologies that transform raw data into meaningful and useful information used to enable more effective strategic, tactical, and operational insights and decision-making.**"

Common functions of business intelligence technologies are:

- reporting,
- online analytical processing,
- analytics,
- data mining,
- process mining,
- business performance management,
- benchmarking,
- text mining and
- predictive analytics.

How does Business Intelligence work for you:



BI applications use data gathered from a data warehouse or a data mart. However, not all data warehouses are used for business intelligence, nor do all business intelligence applications require a data warehouse.

In the traditional sense, Business Intelligence describes technology. We must take the definition further... technology alone cannot solve the one and only purpose of Business Intelligence: *enabling effective decision making*.

Interfacing the human brain:

A computer can be programmed to make decisions based on a set of rules. What happens when a scenario comes along where no rules are written?

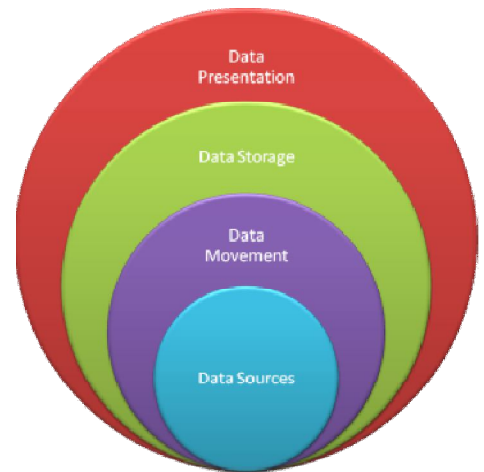
This is where intelligence comes to play, particularly human intelligence. The human brain is an amazing device which has the ability to process numerous different inputs, resulting in an outcome. This is where technology comes to the rescue! A database can process massive amounts of data with ease.

Ultimately, we have to concede that convergence is required to solve the limitations of technology and our brains.

Technology stack for BI:

The technology side of Business Intelligence is often comprised of multiple layers.

- Data Sources: are typically the transactional systems used to run your business. This can include ERP systems, web server logs, manufacturing systems, etc. In some cases, it could be data collected manually on a piece of paper. However, at some point in time, all data must reside in some system where it can be accessed by the Data Movement layer
- Data Movement: is the beginning of a robust technical solution. By moving data out of your data sources, you are reorganizing it in a fashion that makes retrieving data for reporting much easier and faster. Data movement is also referred to as ETL (Extract Transform Load).
- Data Storage: You have to store the data you moved out of your source system somewhere right? This not only helps minimize the impact on your transactional systems, but also provides the opportunity for fine tuning your data queries. A database configured for a transactional system is radically different than a database configured for BI. In a transactional system, the goal is to retrieve 1 record as fast as possible. Meanwhile, a BI database will acquire millions of records, summarize, and then return a concise result.
- Data Presentation: is the user interface to your data, retrieving data from the data storage and process it into the output format the user is looking for. The output format maybe as reports, dashboards, RSS feeds, desktop widgets, mobile apps etc.

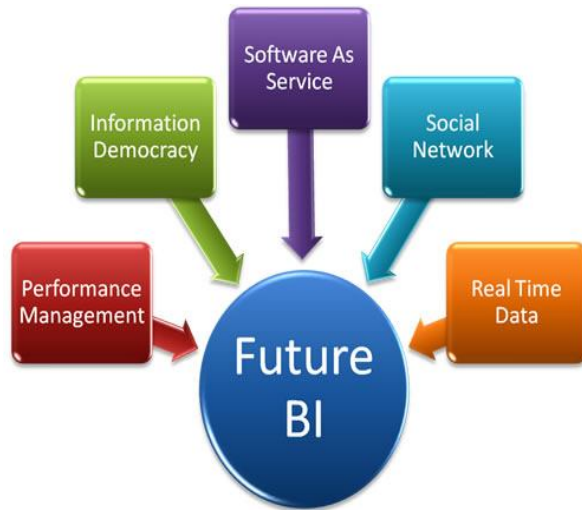


Analyse to decide:

Data is not useful on its own, so it is important for human intelligence to play a role in transforming data into decision enabling information. Business Analysis is the process of taking data and applying human intelligence to create information. Data can be used on its own, but information is far more useful. Information is raw data combined with knowledge of the business climate and processes to produce actionable information and recommendations.

By utilizing the outputs of BI, decision makers can absorb key metrics, apply knowledge reserves and gut feel to result in *effective* decisions to drive their business forward.

Intelligent – by Design:



It is common knowledge, that visualization works more effectively where decisive trends have to be forecast. This may be true, in more ways than one, where data analysis is concerned.

So what is Design Thinking?

Design thinking is understood to be a process for practical, creative resolution to issues in our quest for improved future results.

On the one hand, *analytical thinking* is convergent, concentrated on eliminating alternatives so that there is one alternative to focus on.

This is far different than design thinking, where the first goal is to provide as much alternative as you can, and all the while encouraging out-of-the-box approach to problem solving.

Design Thinking allows the end user to calculate and design any analytics they want on the fly, enabling the end user to look at the business in new ways as they can build charts with any dimensions instantly, leveraging advances in computing power with in-memory analysis technologies. Visual analysis and associative search are the other two important features. They help people explore the data and find the “unknown”. They can ask a question, build a chart, get the answer and ask the follow-up questions and get more answers. Thus, real-time analysis, “designed” to end –user requirements ... is the future of Business Intelligence presentation.

An evolving market:

In meeting today’s challenges to manage performance effectively, business and IT must work together to provide users with the information and capabilities they need. Despite major investments in technology, many business users still rely on spreadsheets, presentations and e-mail as their tools for information and analysis, despite the fact that they are not designed to manage or improve organizational performance and can impede collaboration. Research consistently shows that these desktop productivity tools obstruct efficiency and effectiveness when used in enterprise processes.

BI and performance management systems can function separately, but used in concert they can usefully address key needs of both individual departments and the organization as a whole. BI applied to performance management is, however, still an evolving market. In general organizations are still maturing in their use of business intelligence and performance management.

True benefits of Business Intelligence will come into play only when the sources of these inputs are reliable, presented and analyzed effectively – across the board and the end-users learn to integrate it into their regular understanding of their businesses.

So, get the competitive edge for your organization with Business Intelligence!

Resources:

- [Wikipedia](#)
- [Business Intelligence blog](#)
- www.Qlikview.com
- www.simplifyingbi.net