

: *What is business intelligence?*

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Business intelligence (BI) is often viewed as a term similar to military or competitive intelligence. And hence, the presumed purpose of BI is to gather and provide information to help managers make more "intelligent" decisions. This interpretation of the term may be appropriate for describing the activities of a staff group tasked with gathering information, e.g., a business intelligence unit, but it works less well for explaining IS/IT technologies and applications.

Information Systems vendors and analysts tend to use the term for a category of software tools that can be used to extract and analyze data from corporate databases. The most commonly used business intelligence software is known as a "query and reporting" tool.

Also, business intelligence is a term that some financial analysts and commentators use for categorizing a small group of software vendors and their products. A number of commentators identify the following companies as major BI tool vendors: SAP/Business Objects, IBM-Cognos, Oracle-Hyperion, SAS, and MicroStrategy. Many acquisitions have occurred since 2002 of BI tool vendors.

From a historical perspective, business intelligence is a popularized, umbrella term introduced by Howard Dresner of the Gartner Group in 1989 to describe a set of concepts and methods to improve business decision making by using fact-based support systems. In the early 1990s, the term was sometimes used interchangeably with briefing books and executive information systems.

Seth Grimes (2007) notes the first definition of business intelligence (BI) was in an October 1958 IBM Journal article. In the article, H. P. Luhn argued a Business Intelligence System will "... utilize data-processing machines for auto-abstracting and auto-encoding of documents and for creating interest profiles for each of the 'action points' in an organization. Both incoming and internally generated documents are automatically abstracted, characterized by a word pattern, and sent automatically to appropriate action points."

SDG Computing's (<http://www.sdgcomputing.com/>) Business Intelligence and Data Warehousing glossary defines Business Intelligence Tools very broadly as "software that enables business users to see and use large amounts of complex data". SDG Computing categorizes three types of tools as Business Intelligence Tools: 1. Multidimensional Analysis; 2. Query Tools; and 3. Data Mining Tools.

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Many observers would not include data mining tools as BI tools.

Well, so much for agreement on the meaning of the term Business Intelligence and related terms like Business Intelligence Tools. Microsoft also sells Excel, PerformancePoint Server 2007 and SQL Server with Pivot tables as BI products. IDC recognized Microsoft as one of the fastest-growing BI vendors in 2006. What do some of the major BI vendors say about their BI products and services?

SAP/Business Objects claims it is the world's leading provider of business intelligence (BI) solutions. According to their website, "business intelligence lets organizations access, analyze, and share information internally with employees and externally with customers, suppliers, and partners." Business Objects was founded in 1990 and it "pioneered the modern business intelligence industry by inventing and patenting a 'semantic layer' that insulates users from the technical complexity of database systems".

IBM-Cognos claims it is the leading provider of enterprise business intelligence solutions. Cognos defines business intelligence as "a category of applications and technologies for gathering, storing, analyzing, reporting on and providing access to data to help enterprise users make better business decisions".

Oracle-Hyperion is positioned as "a global leader in business intelligence software". It creates solutions that help businesses measure performance and drive profitability. Hyperion sells a database product called Essbase and financial analysis, performance management and eCRM analysis solutions.

Finally, the MicroStrategy website notes the company helps "corporations transform their operational data into actionable information". MicroStrategy's Business Intelligence platform helps meet query, reporting, and advanced analytical needs.

What does all of this mean to IS/IT staff and business managers? Confusion and "hype" especially with all the new entrants claiming to provide BI software and tools. Broadening the Business Intelligence umbrella is continuing and is increasing the conceptual confusion. For example, LexisNexis and iPhrase are partnering to deliver Business Intelligence solutions based on documents in the LexisNexis Advertising Red Books directories.

Richard Hackathorn, a pioneer in the field of Decision Support Systems, had some comments about Business Intelligence in the November 2001 DM Review. Hackathorn reminds us that information itself is pure overhead and that it delivers no direct value to a business. He says that today the issue

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is making BI actionable. He argues that "if your BI projects are not changing the way that you do business, then they should not be considered BI". Apparently, we still need to "institutionalize" decision support technologies to gain benefits.

Business intelligence services are "big" business. BI platforms is about a \$5.5 billion market. By the year 2010, business intelligence services should be at least \$15 billion annually. Wayne Eckerson notes packaged analytic applications are becoming more popular. Eckerson (in Kelly, Jan. 2009) notes "In 2009, we will start to see more flexible dashboards that let users model and simulate reality using historical data, collaborate more closely with others, and close the loop between decisions and actions." He also forecasts that "Specialty visualization vendors, such as Tableau Software, QlikTech, Advizor Solutions, and Spotfire will see heightened demand in 2009 ..." Gartner (in Kelly, Jan. 2009) forecasts "In 2009, collaborative decision making will emerge as a new product category that combines social software with BI platform capabilities."

Commentators, IS/IT staff and managers are having problems with the term Business Intelligence. Let's show some mercy and at a minimum add descriptors like services, tools, department or industry to the phrase. Business Intelligence has replaced OLAP as the "hot" buzzword and some vendors want to capture the data mining and customer relationship fads.

In general, I have problems with all of the various interpretations and uses of the term Business Intelligence. Some BI vendors stress one interpretation and some stress another. Some vendors are moving to the term analytics, but decision support is what BI is all about. The most common "business intelligence" software sold is for querying a database and creating a report ... vendors should focus on tools for supporting decision making rather than providing "intelligence" to managers or making managers "smarter", "more capable as decision makers" or "more intelligent".

Let's focus more effort on examining, building and studying various types of DSS to provide intelligence information to managers, especially Data-Driven Decision Support Systems. The decision support industry should provide IT staff and their organizations with a variety of decision support products and services. Managers really do need information systems that meet their decision support needs.

Reference

Grimes, S., "A Brief History of Text Analytics," BeyeyeNetwork, October 30, 2007, URL <http://www.b-eye-network.com/channels/1394/view/6311> .

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Hackathorn, R. "Making Business Intelligence Actionable," DM Review, November 2001, p. 32.

Kelly, J., "Experts forecast business intelligence market trends for 2009," SearchDataManagement.com, January 07, 2009, URL http://searchdatamanagement.techtarget.com/news/article/0,289142,sid91_gci1344197,00.html

Luhn, H. P., "A Business Intelligence System," IBM Journal, October 1958, URL <http://www.research.ibm.com/journal/rd/024/ibmrd0204H.pdf>

The above response is modified and updated from Power, D., What is business intelligence? DSS News, Vol. 2, No. 23, November 4, 2001.

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Last update: 2005-08-06 16:38