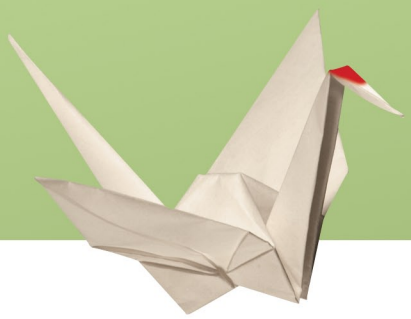
Business intelligence
To support your business objectives

Information Management software

Dive deeper into more kinds of information for greater business insight.

IBM embedded analytics solutions included in DB2 Warehouse



Most companies these days invest a significant amount of time and money maintaining ever-growing databases of information. And although that information may hold the key to a competitive advantage—valuable insight that can help retain customers or drive product improvements—much of that data has remained untapped. Most business intelligence tools are unable to search it; therefore, extracting business value from it has been practically impossible.

Further, most business intelligence and analytics tools are separate from the data warehouse, which creates two significant issues. First, most tools require you to copy all of your data out of the warehouse, which introduces a number of risks and limitations. You are often left wondering if you've captured all of the data or if you're dealing with the most current data. And each time you need to use the tools, you have to copy out your data again, which can be time consuming and which means you are no longer performing real-time analysis, as the data within the warehouse continues to change. Second, tools that are separate from the warehouse require constant maintenance. If you upgrade your data warehouse, you have to update your business intelligence and analytics software and vice versa. Or you have to invest valuable development time integrating business intelligence tools into your database—and then maintain that integration as your infrastructure evolves.

- **Delivers insight to a broader set of users, improving decision making across the enterprise**
- **Extracts value from information that was previously untapped**
- **Reduces the cost of business reporting and analysis**

Companies that can give everyone from decision makers and managers to front-line employees access to focused, role-specific information have the potential to operate more efficiently, innovate more often and consequently jump ahead of their competitors. But to do this, you've got to move beyond status quo approaches that separate analytics tools from the database. Part of IBM DB2® Warehouse 9 software, IBM embedded analytics capabilities deliver a sophisticated, yet easy-to-use set of tools embedded within the data warehouse that you and your people can use to gain valuable insight into your business. With DB2 Warehouse, IBM has done the integration work for you, helping to simplify implementation and maintenance, and improve both user adoption and your return on investment.

Providing more valuable business intelligence to a broader range of users

Advanced cubing/online analytical processing (OLAP), unstructured analytics, in-line analytics, and data mining and visualization capabilities can enable you to take advantage of previously untapped sources of information about your business. And these capabilities work together to help you make valuable business intelligence more readily available to a wider pool of users.

When end users need information, it's time-consuming to launch a separate business intelligence tool or sift through a list of reports for the data they need. It isn't their job, they often don't have the expertise, and either way it stifles productivity. That's why embedding analytical capabilities and insights directly into existing applications and portals is so valuable. With DB2 Warehouse, users can access analytics tools from the applications they use all the time—such as a Web browser or spreadsheet. Plus, because the tools are built right into the warehouse, there's no need to create a copy of the data. Using IBM embedded analytics capabilities, you're always working with the most complete and up-to-date information possible—and you eliminate a step in the process, because you don't have to copy your data out of the warehouse to work with it.

IBM DB2 Warehouse is a complete, multipurpose environment that allows you to access, analyze and act on virtually any type of information—structured and unstructured, operational and transactional, real time and historical. It enables you to reach farther into all of your business data; look more deeply to find hidden relationships, patterns and trends; and act more quickly using reliable, timely insight to drive more sales, improve employee productivity, and strengthen and streamline relationships with customers, trading partners and suppliers while keeping risks in check.

Giving you access to more data than ever before

Until now, information stored in unstructured fields, such as call notes, comments fields and e-mails, has been essentially unsearchable. The unstructured analytics capabilities included in DB2 Warehouse enable you to gain a better understanding of customer, partner and product issues, and to broaden the scope of information available to decision makers—in the boardroom, in the back office and on the front line with customers.

IBM DB2 Warehouse unstructured analytics capabilities enable native processing within your warehouse and include two basic annotators that use dictionary and pattern-based extractors to interpret free-form text and generate more useful metadata. For example, you could extract from a call center notation field the type of request, the type of service needed and the product components referenced. This information could then be leveraged by the warehouse to enable additional mining and reporting.

Facilitating easy access to information via the applications you use every day

IBM DB2 Alphablox® software, which is fully integrated in DB2 Warehouse, provides the window through which business users can look at right-time, in-context information from across the enterprise—including structured and unstructured data from relational and multidimensional databases—to support more informed decisions.

DB2 Alphablox runs as a Java™ Platform, Enterprise Edition (Java EE) technology-compliant application in the application server. Unlike traditional query and reporting tools that interact with application servers, DB2 Alphablox leverages the application services, portal services and integration broker services provided by the application server.

Because DB2 Alphablox relies on Web-based deployment, users can employ a self-service model to gain access to data from the applications they use all the time—such as a Web browser or spreadsheet—so database administrators don't need to develop reports for every user. And the IBM DB2 Alphablox Blox® Builder tool, which comes standard in DB2 Warehouse, provides an intuitive user interface that makes it easier than ever to quickly assemble analytics applications without programming, reducing your development costs.

Linking business variables to perform deeper analyses

DB2 Warehouse includes advanced cubing services for OLAP that enable multi-dimensional analysis of data, allowing you to link multiple business variables together to perform deeper analyses than previously possible. Specifically, DB2 Warehouse cubing services gives you the ability to analyze business data using intuitive multidimensional and hierarchical navigation—or, in other words, to slice, dice and drill down into your data in more ways than previously possible—without having to extract the data from your warehouse.

The cubing engine uses a standard set of application programming interfaces to feed data stored in the database to a variety of tools that perform multidimensional analysis. You can ask intuitive and complex questions about your business, such as, "What was the profitability for the third quarter in the southeast region for all insurance products?" Such a question requires multiple perspectives on the data, such as times, regions and products. And DB2 Warehouse also includes rich presentation components to enable visual analysis of data mining results, which can then be embedded into Web-based applications, customized and distributed to a broad range of users.

Helping you develop more meaningful reports

In the past, when you wanted to perform data mining on a set of data, you had to extract the data from your warehouse, move it to a datamart and only then could you begin to work with it. However, this approach was time-consuming and created a potential discrepancy between the extracted data and the actual data within your warehouse, which would naturally continue to be updated by your users and applications.

DB2 Warehouse provides embedded data mining capabilities that allow you to perform segmentation and market basket analyses as well as predictive analysis—directly within the database. This means you're working with current data, delivering analytics in real time. And because the data mining capabilities are no longer limited to structured data, you can mine a more complete set of data and therefore develop more meaningful reports. DB2 Warehouse supports standard data mining model algorithms such as clustering, associations, classification and prediction.

Why IBM?

IBM has the vision and the extensive industry experience to help you leverage the robust analytics features built into DB2 Warehouse software. Committed to delivering a superior product along with quality services, IBM can help you significantly reduce the risks associated with transforming how your business captures, manages, uses and delivers information across all aspects of your operations. In addition, a vast network of IBM Business Partners can deliver the support you need, as well as solutions that are designed to integrate easily with IBM technology and help you get the most value from your investments.

For more information

To find out more about how the embedded analytics capabilities included in DB2 Warehouse 9 can help you gain the most value from your data, contact your local IBM representative or visit:

ibm.com/bi

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