

Information Management software

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

Embedded analytics solutions included in IBM InfoSphere Warehouse software



Most companies these days invest a significant amount of time and money in 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.





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

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 your data out of the warehouse, which introduces a number of risks and limitations. You are often left wondering whether you've captured all of the data and whether 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 means you spend a lot of time performing analysis on data that 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.

Companies that can give everyone from decision makers and managers to frontline 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 InfoSphere™ Warehouse software, IBM embedded analytics capabilities are designed to deliver a sophisticated, yet easy-to-use set of tools embedded within the data warehouse that you and your staff can use to gain valuable insight into your business. With InfoSphere Warehouse, IBM has done the integration work for you, helping to simplify implementation and maintenance, and helping to improve both user adoption and return on investment.

Providing valuable business intelligence to a broad 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. That's why embedding analytical capabilities and insights directly into existing applications and portals is so valuable. With InfoSphere Warehouse, users can access analytics tools from the applications they use all the time—such as a Web browser or a 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 working with the most comprehensive and up-todate information possible—and you can eliminate a step in the process, because you don't have to copy your data out of the warehouse in order to work with it.

IBM InfoSphere Warehouse is a comprehensive, multipurpose environment that allows you to access, analyze and act on virtually any type of information—structured and unstructured operational and transactional, realtime and historical. It enables you to reach farther into your business data; look deeply to find hidden relationships, patterns and trends; and act quickly using reliable, timely insight to drive 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, comment fields and e-mails, has been essentially unsearchable. The unstructured analytics capabilities included in InfoSphere

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 InfoSphere Warehouse unstructured analytics capabilities enable native processing within your warehouse and include two basic annotators that use dictionary- and pattern-based extractors to interpret freeform 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 type of 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 integrates with InfoSphere Warehouse software, 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 software 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 Webbased deployment, users can employ a self-service model to gain access to data from the applications they use all the time, so database administrators don't need to develop reports for every user. And the IBM DB2 AlphaBlox Blox® Builder tool, which comes standard in InfoSphere Warehouse software, provides an intuitive user interface that makes it easy to quickly assemble analytics applications without programming, potentially reducing your development costs.

Linking business variables to perform deeper analyses

InfoSphere Warehouse includes advanced cubing services for OLAP that enable multidimensional analysis of data, allowing you to link multiple business variables to perform deep analyses. Specifically, InfoSphere Warehouse cubing services give 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?" To answer this question, you need multiple perspectives on the data, including times, regions and products. InfoSphere 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 and move it to a datamart. Only then could you begin to work with it. 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.

InfoSphere Warehouse provides embedded data mining capabilities that allow you to perform segmentation and marketplace basket analyses as well as predictive analysis—directly within the database. This means you're working with current data, delivering analytics in realtime. And because the data mining capabilities are no longer limited to structured data, you can mine a more comprehensive set of data and therefore develop more meaningful reports. InfoSphere Warehouse sofware 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 InfoSphere Warehouse sofware. 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 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 IBM InfoSphere Warehouse software can help you gain the most value from your data, contact your IBM representative or IBM Business Partner, or visit:

ibm.com/software/bi

© Copyright IBM Corporation 2008

IBM Corporation Software Group Route 100 Somers, NY 10589 U.S.A.

Produced in the United States of America 04-08 All Rights Reserved

AlphaBlox, Blox, DB2, IBM, the IBM logo, ibm.com and InfoSphere are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries or both.

Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries or both.

Other company, product and service names may be trademarks or service marks of others.

References in this publication to IBM products or services do not imply that IBM intends to make them available in all countries in which IBM operates.

The information contained in this documentation is provided for informational purposes only. While efforts were made to verify the completeness and accuracy of the information contained in this documentation, it is provided "as is" without warranty of any kind, express or implied. In addition, this information is based on IBM's current product plans and strategy, which are subject to change by IBM without notice. IBM shall not be responsible for any damages arising out of the use of, or otherwise related to, this documentation or any other documentation. Nothing contained in this documentation is intended to, nor shall have the effect of, creating any warranties or representations from IBM (or its suppliers or licensors), or altering the terms and conditions of the applicable license agreement governing the use of IBM software.

The IBM home page on the Internet can be found at ibm.com®.