

## Who's Who in Open-Source Business Intelligence

**Andreas Bitterer**

Many of the commercial business intelligence (BI) vendors have a long history and large marketing budgets, resulting in high visibility and mind share. Their lesser known open-source counterparts, such as Actuate BIRT, JasperSoft, Pentaho, or Spago have, however, started to gain traction in the market, beyond simple report writers for small shops and even larger enterprises are becoming aware of available open-source BI options.

### Key Findings

- Open-source BI is here to stay.
- Open-source BI platform products still have limited penetration in the Gartner client base (as shown by informal surveys during Gartner BI Summits). Less than 2% of surveyed attendants reported current usage of an open-source BI product.
- While many open-source BI vendors boast thousands of commercial customers and even more downloads, overall revenue still only represents a small fraction of market share.
- Small independent software vendors (ISV) increasingly opt for OEM relationships with open-source vendors to provide BI functionality embedded in their products rather than including commercial BI platform software.
- Open-source BI is particularly successful in certain market segments, such as midsize companies, government and in regions such as Eastern Europe and Asia.
- Expect a three-wave approach to open-source BI adoption:
  - Wave 1: 2004 to 2007 — early adopters.
  - Wave 2: 2008 to 2012 — driven by midmarket enterprises.
  - Wave 3: 2012 and beyond — just another aspect of sourcing.

### Recommendations

- Use the same decision criteria (such as functionality, reliability, supportability, third-party support and stability) for choosing an open-source BI platform as you would use for proprietary commercial options.
- Consider open-source BI products for application developers who need basic BI capabilities. That is reporting embedded in their respective applications and for small projects, potentially complementing any BI standard.

- While they do not have the cost of commercial BI platforms, recognize that open-source BI platforms do not provide the same range of capabilities as commercial BI platforms.
- Unless you belong to a "type A organization" with significant development resources and no fear of risk associated with software engineering, do not attempt to understand the source code, but purchase a support subscription.

## STRATEGIC PLANNING ASSUMPTION(S)

---

By 2012, adoption of open-source BI being used as an enterprisewide standard platform will triple.

## ANALYSIS

---

The increasing focus on open-source software has reached the mainstream business intelligence market. As some organizations are looking to reduce costs in their sometimes large BI deployments, they are hoping that open source gives them greater leverage for their money. Other open-source BI deployments are initiated by application developers that are looking for a way to embed BI functionality into their applications. Similarly, companies often cannot afford to roll out BI technology to hundreds or maybe thousands of users, even from their preferred vendor, because of steep licensing costs and are therefore considering an open-source solution to complement the current infrastructure.

There are about a dozen vendors or projects that can be considered offering open-source BI, although quite a few of those same companies also provide commercial versions of the software, often with significant enhancements over the "free" version. The currently available offerings are effectively split into two camps: the BI platform approach, supported by a commercial vendor, that mainly generates its revenue by providing professional services around the BI platform. Alternatively, there are open-source projects, backed by a few individuals, who maintain a small community, but do not have any commercial interests otherwise. Almost all platforms, tools and source code, in their various open-source versions, are freely available for download at SourceForge (<http://sourceforge.net>) the largest open-source software development Web site, which currently maintains over 160,000 projects and over 1.7 million registered users.

## Vendors

Founded in 2004 and among the best-known open-source BI offering in the market, Orlando-based **Pentaho** provides a breadth of functionality that can be considered the closest match to commercial offerings from companies such as Business Objects, Cognos or Oracle.

Pentaho's offerings include a simple reporting solution and the more comprehensive Pentaho BI suite, which also includes analysis, dashboard and data mining capabilities. For both offerings customers can purchase a subscription (Gold or Platinum, with different service levels, such as set response times or a toll-free hot line). The subscription also enables access to additional BI platform functionality (for example, system auditing, performance monitoring as well as single sign-on or clustering), which is not available in the open-source version.

To round out the capabilities for the BI platform, Pentaho has acquired the assets and hired the lead developers of some complementing open-source projects, such as Mondrian or Kettle, for online analytical processing (OLAP) or extraction, transformation and loading (ETL) technology, respectively. The BI platform, which runs on most popular Windows versions, Linux distributions and even Mac OS, is based on server-side Java, a thin client Ajax front-end and an Eclipse-based design environment.

San Francisco-based **JasperSoft** is another well-established brand in the open source BI market. Founded in 2001, the vendor reports upward of 3 million downloads and boldly calls itself "the market leader in open-source BI" with more than 8,000 commercial customers worldwide. Still, that claim is difficult to substantiate as many open-source vendors are quoting large numbers of product downloads, often hundreds of thousands or even millions, while the number of production deployments of their community editions is unclear.

The JasperSoft product family includes JasperServer, JasperReports, the JasperStudio report designer, the JasperAnalysis OLAP analysis server and JasperETL, which is based on the open-source ETL engine from Talend.

JasperSoft has established a partner network that includes companies such as Sun Microsystems, MySQL, Novell, Red Hat and Unisys. With Jasper4Solutions, JasperSoft attempts to extend its community into the world of applications with specific solutions for salesforce.com, SugarCRM and Oracle eBusiness Suite. Many small ISVs are also including JasperReports as the reporting component in their respective software packages.

Publicly-traded **Actuate Corporation**, founded in 1993 and based in San Mateo, has been selling commercial BI software since its formation. In 2004, Actuate became the first public BI software company to enter the open-source space by petitioning for membership into the Eclipse Foundation and proposing a new open XML report design specification and accompanying toolset. The Business Intelligence and Reporting Tool (BIRT), founded and co-lead by Actuate, is based on the Eclipse framework and with BIRT 2.0. Announced in 2006, it became the foundation of the vendor's commercial product line with Actuate 9. Under the BIRT project, Actuate is making a small subset of its commercial enterprise reporting solution available under an open-source license.

By early 2008, Actuate reported over 2 million BIRT downloads, however, it is largely unclear how many of those went into production. At the end of 2007, the company claimed more than \$8 million in BIRT-related commercial sales. For BIRT, Actuate offers a variety of products and services, supporting users through an annual subscription model for the open-source version, which has limited capabilities compared to the full Actuate 9 platform. As such, the BIRT offering must be considered an attempt to attract highly technical do-it-yourself audiences and get a "foot in the door." Customers looking for the full functionality BI platform are required to upgrade to the commercial Actuate license.

The relatively new BIRT Exchange is a self-service community Web site sponsored by Actuate. The site offers BIRT developers resources to learn about and get support for both open source and commercial BIRT products. As a significant partner, Actuate has signed up IBM, which has wrapped BIRT into its Rational products, such as Rational Portfolio Manager V7.1.

Italian company Engineering Ingegneria Informatica (EII), the owner of **SpagoBI**, has a very different approach to open-source BI. Instead of a subscription-based revenue stream, SpagoBI is deployed by EII's consultants that implement solutions in the vendor's key industries, such as finance, government, healthcare and utilities. SpagoBI started in 2004 and was later released to the ObjectWeb Consortium, now called the OW2 Consortium ([www.ow2.org](http://www.ow2.org)), of which EII is a founding member. The platform itself is released in a single version and offered under the Lesser General Public License, and built and maintained by 30 developers. Approximately 100 out of EII's 6,500 employees are building custom solutions.

SpagoBI promotes "Free and Open Source Software" (FOSS) and an integration approach, by which the system integrator drives the research and development efforts of an otherwise free BI platform, that includes all available functionality. The vendor claims that, through the FOSS model, enterprise-level deployments are possible without upgrading to a commercial version of the open-source software package. In addition to traditional capabilities, such as reporting, multi-dimensional analysis, or dashboarding, SpagoBI also contains data mining, a Query-by-Example (QbE) engine, geographical-based analysis and collaboration tools.

Not surprisingly, most of SpagoBI's users are in Europe, mainly Italy and France, as EII's commercial efforts have focused on those countries. EII maintains no real sales channel and ISV partner network outside its core countries, although the vendor claims over 100,000 downloads from around the world (including China).

As the open-source BI community is growing continuously, more local players are getting on the radar of potential end-user companies. **Jedox**, based in Freiburg, Germany, are the makers of Palo OLAP, an analytic engine that has grown a decent following. Headquartered in Toronto, Canada, **SQL Power Group** recently announced that it will turn its previously proprietary BI tools (plus its modeling and data cleansing tools) into open-source offerings. However, since the company considers itself a consulting firm, not much research and development effort apparently goes into the products. **LogiXML**, from McLean, Virginia, is offering part of its toolset as "free reporting" software and as such does not qualify as open-source, but may be equally interesting for small-scale reporting requirements.

At the same time, over the years quite a few open-source BI projects have come and gone. Many initiatives were started in basements, garages or even in universities. However, when development and support were either put on hold, or ceased to exist, the whole project went into limbo. While the source code of those projects may to this day still be available at various Web sites, the following open-source BI projects can safely be pronounced as no longer functional:

- BEE project — <http://sourceforge.net/projects/bee/>
- Open Intelligence — [www.openi.org](http://www.openi.org)
- OpenReport — [www.openreport.org](http://www.openreport.org)
- RLIB — [www.sourceforge.net/projects/rlib/](http://www.sourceforge.net/projects/rlib/)

## RECOMMENDED READING

---

"Magic Quadrant for Business Intelligence Platforms, 2008"

"Open-Source Business Intelligence: State of the Market"

"Open-Source Won't Kill the Commercial Data Integration Tools Market Yet"

## REGIONAL HEADQUARTERS

---

### **Corporate Headquarters**

56 Top Gallant Road  
Stamford, CT 06902-7700  
U.S.A.  
+1 203 964 0096

### **European Headquarters**

Tamesis  
The Glanty  
Egham  
Surrey, TW20 9AW  
UNITED KINGDOM  
+44 1784 431611

### **Asia/Pacific Headquarters**

Gartner Australasia Pty. Ltd.  
Level 9, 141 Walker Street  
North Sydney  
New South Wales 2060  
AUSTRALIA  
+61 2 9459 4600

### **Japan Headquarters**

Gartner Japan Ltd.  
Aobadai Hills, 6F  
7-7, Aobadai, 4-chome  
Meguro-ku, Tokyo 153-0042  
JAPAN  
+81 3 3481 3670

### **Latin America Headquarters**

Gartner do Brazil  
Av. das Nações Unidas, 12551  
9º andar—World Trade Center  
04578-903—São Paulo SP  
BRAZIL  
+55 11 3443 1509