Business Intelligence as a Service: Findings and Recommendations

Bill Hostmann

Business intelligence (BI) capabilities and applications obtained as a service will see growth that mirrors that of transactional business applications which are services offerings. IT managers and senior business leaders must decide if BI as a service is right for them and how services-based BI and project management (PM) applications will integrate with on-premises applications and infrastructure.

Key Findings

- Today, the percentage of revenue from BI as a service offerings is insignificant compared to the overall BI platforms market.

- Midsize businesses with limited BI budgets and skills as well as users/managers of business processes applications which have been acquired as software as a service (SaaS) offerings (for example, salesforce.com, NetSuite, SugarCRM) will be major growth drivers of revenue for BI as a service for business applications (see Note 1).

- There are two types of BI as a service offerings: generic BI platform capabilities (for example, online analytical processing [OLAP], reporting, analysis, data mining) and application-specific offerings (for example, Web analytics, fraud analysis, risk analysis, benchmark analysis). Some of these services offerings are more mature than others.

- With the exception of the SAP/Business Objects "On Demand" products, none of the major BI platform vendors has a significant presence or BI as a service offering in the market, nor are they expected to in the near future.

Recommendations

- Beware of ruling out BI as a service before assessing it. To be successful you must still invest in business processes integration, governance and user skills.

- Focus on tactical/departmental initiatives to start; consider BI as a service capabilities to complement application platform-as-a-services offerings since the related IT and user teams will be more familiar with how to evaluate and implement SaaS offerings.

- Some BI as a service offerings are more mature than others. Evaluate a BI as a service vendors' operational practices, security policies, integration interfaces, flexibility of system architectures and customer references.

- Ensure that you can easily move both data and metadata into and out of the BI as a service offering and that a shared tenancy model doesn't limit your ability to do so.
ANALYSIS

Market Overview

The need to access, analyze and distribute/collaborate using information from within enterprise business applications for making better decisions and managing performance is often cited as a driver for BI platforms and related technologies/products (for example, data warehouses, data integration). The growth in on-premises BI applications has followed the growth of on-premises enterprise software applications, such as enterprise resource planning, supply chain management and customer relationship management.

However, increasing involvement from line-of-business buyers, constrained budgets and IT resources, desire for rapid deployment and the need to reduce operational overhead is driving growth in SaaS offerings.

As subsegments of on-premises business applications (and the information within those applications) shift to a SaaS model, the BI applications will follow.

Adoption of SaaS varies widely both between and within markets and subsegments of enterprise applications. SaaS revenue as a percentage of total software for each market ranges anywhere from under 1% in ERP’s manufacturing and operations to 30% of supply chain management’s (SCM’s) supply chain sourcing. CRM shows more-general market adoption ranging between 7.5% and 18.5% of total software revenue, depending on subsegment. Sales represents the highest adoption, with 18.5% of the subsegment revenue attributable to SaaS. In 2006, SaaS accounted for an estimated 12% of total CRM software revenue. Today, BI services-based offerings account for a very small (less than 5%) of the overall BI platform market revenue. We expect the future growth of BI as a service will mirror and be driven by the use and growth of information within business applications obtained as a service (for example, CRM/Sales applications, Supply Chain Management).

Like enterprise applications, BI as a service capabilities enable customers to quickly deploy one or more capabilities of BI without significant IT involvement or the need to deploy and maintain an on-premises solution.

Types of Buyers

The majority of new BI as a service demand is coming from two types of buyers:

- Users of business applications which are also are provided a service.
- Users requiring industry/domain-specific analytic and benchmarking applications which combine information from outside an organization’s processes and information firewall.
- Midsize businesses, or business departments within enterprises who have limited BI budgets and skills, less access to IT staff and BI technology and a need for rapid deployment of a sub-set of BI platform capabilities.

Types of Offerings

The majority of the new user demands will be addressed by three types of BI as a service offerings:

- Analytic applications: Support performance management with prepackaged functionality for specific solutions, such as WebTrends for Web Analytics, Adaptive
Planning and Host Analytics for corporate performance management (CPM), WebApps for workforce analytics, and SAS OnDemand Solutions and LucidEra for sales operations.

- **BI platform:** Provides a development and integration environment, information delivery and analysis, such as SAP/Business Objects Crystal Reports for reporting, as well as platforms from PivotLink, Oco, Birst and Blink.

- **Information management infrastructure:** Provides the data architecture and data integration infrastructure, such as Informatica for data and application integration, Pervasive Software, 1010 for data and Oco for broad data management.

**The Role of the Megavendors**

Through 2012, no current on-premises business application vendor (including megavendors SAP, Oracle and Microsoft) will dominate in delivery of "cloud"-based business application services or SaaS-based business applications in their respective markets. (See "Predicts 2009: Software as a Service Gains Traction.") With the exception of the SAP/Business Objects "On Demand" products, none of the major BI platform vendors has a significant presence or BI as a service offering in the market nor are they expected to in the near future.

**Considerations When Deciding on BI as a Service Offerings**

- **How much customization do you need?** Do your requirements fit neatly into a predefined BI as a service application/offering or do you need the customization and data source flexibility of an on-premises BI platform solution?

- **Implementation time:** The demands of your project may be unusual and BI as a service vendors have varying levels of customization and automation, so implementation times can vary.

- **Application shutoff:** In two or three years, when your service contract is up, you are faced with the decision of signing another rental contract or having your BI application shut off.

- **Hidden fees:** Service offerings can be loaded with hidden fees which can add up. For example, features that seemingly should be included in the core product are charged as extra (for example, fees for additional information sources, fees for integration services to third-party applications and even Office applications).

- **Ownership and security of data:** Most BI as a service applications are hosted applications. Your data resides on someone else's server, and security risks may be involved. Your client, may have serious concerns or contractual terms about storing their information on a third-party server. Also, if you need any of your data, you should expect to pay a fee to have your vendor provide it for you.

- **Process integrity:** Process integrity ensures that a business process operates and delivers the desired and expected outcome as defined by the process. As more business processes move outside the enterprise, ensuring process integrity will become harder. If you run multiple business applications as part of a business process (for example, Office applications, or accounting applications), it can be a challenge to create integration between such products and a hosted application running in a SaaS model (see "Introducing Process Integrity: Critical to Business Applications, SOA Compositions and Processes"). You need to define who is responsible to ensure that process integrity
is maintained. New governance tools that model end-to-end business processes that extend to outside sources will be required.

- **Your business is at the mercy of the quality of service of an external network.** The Internet is more and more stable, but outages can and do occur. With a hosted BI as a service solution, if your Internet or bandwidth is down, a key business process or application could also be down.

- **The great debate:** Some organizations have highly contentious arguments and numerous meetings over when and how to use on-premises versus services-based applications. Gartner suspects those arguments will be going on for a long time. Governance policies and sourcing standards need to be defined for both on-premises and service provided BI offerings.

**RECOMMENDED READING**


"Predicts 2009: Business Intelligence and Performance Management Will Deliver Greater Business Value"

"Predicts 2009: Software as a Service Gains Traction"

"The Impact of Alternative IT Delivery Models on Data Quality"

"The Impact of Alternative IT Delivery Models on Data Warehousing"

"SaaS Impact in Corporate Performance Management"

**Note 1**

**Definition of Software as a Service**

Gartner defines SaaS as software that's owned, delivered and managed remotely by one or more providers. The provider delivers an application based on a single set of common code and data definitions, which are consumed in a one-to-many model by all contracted customers anytime on a pay-for-use basis, or as a subscription based on usage metrics.