

GETTING YOUR HEAD OUT OF THE CLOUDS

UNDERSTANDING BUSINESS INTELLIGENCE CLOUD SERVICES

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Cloud-based business intelligence systems face two primary adoption challenges:

- Distinguishing the need, driving the business case
- People do not understand cloud systems

If you ask ten people what “the cloud” is, you will get ten different answers. To be fair, the technology industry has done a horrible job explaining what the cloud is and is not. In fact, even people that work in the software industry cannot produce a unified definition. The cloud, simply put, is a mythical, centralized echo-system where data (pictures, documents, raw operational numbers, etc.) are stored for easy access.

The data is not on the hard drive of your personal laptop or stored on the physical servers in your corporate data center. Instead, the data is stored in a third party environment (such as Google Drive or iCloud) where you can access it using a web browser or installed application on your machine. The cloud is a storage mechanism—nothing more.

I have no doubt that this characterization will alarm the technology industry. I call the cloud mythical because, if you believe the marketing about the cloud, it is touted as all things to all people. We (speaking from an insider’s perspective) love to make things seem magical and complex. The magic is not the cloud, which is simply storage and data access. The magic is how you can use it. Applications that filter our view and allow us to access the data in interesting ways provide the real value. Consider your smart phone. What

makes it special is not the fact that it makes calls and takes pictures. You like your phone because of the application ecosystem. It keeps your calendar, entertains you with games, and does a thousand other things. This concept has made companies like Apple very successful over the last decade.

There are various vendors that offer cloud solutions:

- Drop Box
- Salesforce
- Apple (iCloud)
- Oracle BI Cloud Services (BICS)

Each of these vendors starts with a storage mechanism for your data and then applies an application paradigm across the top of it. Drop Box is a storage and thin-client access system for sharing files; Salesforce (among other things) holds CRM data; iCloud holds your data and provides a series of cloud tools for personal productivity; Oracle BICS allows you to upload and visualize data.

People provide various opinions on the cloud based on their background. A business user sees the cloud as one thing. IT may see it as something very different.

Business intelligence, simply put, is about questions and answers. Business users want the freedom to ask questions of their data and get answers. The complexity in, and the art of, business intelligence deployments is creating models and systems to provide users with trusted data necessary to answer these questions. IT needs the ability to govern the data to ensure it is valid and consistent. Users do not want to wait for a new analysis to be built each time they have a question. Further, they often want to incorporate additional data sets into the analysis process. This could be census information, commodity

prices, or other data sets that are freely available or purchased from a data vendor (such as Adobe or Google Analytics). Leveraging a cloud-based application for business intelligence is a natural evolution of the storage paradigm.

BICS in a Nutshell

Oracle BI Cloud Services is a combination of the Oracle Database (11G R2) and Oracle Business Intelligence optimized for rapid development and deployment.



The goal of BI Cloud Services is to allow users to quickly load data sets and build visualizations and dashboards. With a standard Oracle Business Intelligence Enterprise Edition deployment, the process of loading, modeling, and visualizing data can take weeks or months. With BI Cloud Services, this process (in many circumstances) can be reduced to hours or days. For example, a user can load an Excel-based data set and build visualizations within a few hours. All of this can be done on a platform composed of industry-leading technology.

BI Cloud Services represents more of a custom analytic application or departmental solution compared to an Oracle Business Intelligence Enterprise Edition deployment. This concept, however, should not detract from the value of the solution. In fact, the ability to quickly analyze in an environment founded on world-class infrastructure and database technology should allow BI Cloud Services to be a suitable alternative to rapid visualization tools like Tableau and Qlikview. Rapid development tools like Tableau do a good job of providing interesting visualizations, but the data models

and processing power to handle queries across large data sets are ignored by the tools. Instead, organizations must design the data model and infrastructure appropriately. While rapid visualization tools may appear to provide more freedom to the end-user community, they often increase the dependency on IT long-term.

BI Cloud Services can integrate more effectively with existing infrastructure and be used to expand from a departmental to an enterprise-wide solution. Even so, speed to value and enterprise scalable technologies (by themselves) do not make a complete value proposition. These characteristics need to be blended with the overall needs of an organization.

Creating a Value Proposition

The value proposition for implementing Oracle BI Cloud services (or any BI cloud service) varies based on the type of organization. Oracle BI Cloud Services generally provide:

- Savings for the technical infrastructure and personnel
- Freedom for personalized analytics
- Control of analytics and data standards

At first glance, some of these values seem contradictory. However, that depends on an organization's perspective.

TECHNICAL VALUES

For any company, implementing a departmental or personal analytic solution can be daunting. There are IT standards and support requirements to consider. BI Cloud Services can mitigate these concerns. Because Oracle BI Cloud Service is a hosted solution, it:

- Removes the need for onsite servers. BI Cloud Services leverages the Oracle database on an Exadata foundation for storing and querying

data. All software updates (both to the base OS and analytic software) are handled automatically by Oracle.

- Removes the need for disaster recovery processes for the BI environment. Data in the BI Cloud service is backed up automatically every night. The client also has the ability to snap shot the analytic environment to archive the data model and analysis.
- Minimizes FTE requirements. Both the data model and reports in the BI Cloud Services environment can be managed by the business. This removes the need for additional personnel or specialized skills in the IT organization.

It is important to note BI Cloud Services is not the same as a traditional hosted solution. Software updates, operating systems, and product enhancements are pushed out based on Oracle's development cycle. Further, while data needs to be moved from the desired source systems to the BI Cloud Services, moving your data to the BI Cloud environment is handled through a manual upload or packaged automation. The extraction of the data from the source systems and uploading to the BI cloud environment may fall to the IT organization.

PERSONALIZED ANALYTICS

One of the most prevalent requests in a BI deployment is for users to build their own analysis and work with their own data. In a more typical BI deployment, users are limited to working with data in corporate standard environments; leveraging the data models the IT (or business systems) teams have created. This often runs counter to the needs of a custom analytic application.

With BI Cloud Services, the user community has the ability to integrate both standard corporate data and external drives that they deem relevant to the analysis (for example, commodity prices). This can be done by leveraging enterprise class technology (the Oracle database and Oracle

Business Intelligence) without relying on IT to alter the more standardized reports used across the business.

INCORPORATING STANDARDS

Even though the user community has the freedom of self-service analysis, it does not mean that leveraging BI Cloud Services needs to violate, or run counter to corporate standards. Both the data model and tools in the Oracle BI Cloud Service are enterprise class technologies. If you are an Oracle Business Intelligence Enterprise Edition client, both the modeling and the data models used in the BI Cloud Service can be moved from the cloud to on-premise deployments. If a user or department creates a piece of analysis that would benefit the larger organization, it can be migrated and released to a wider audience.

Deciding to Move to BI Cloud Services

The motivation for moving to cloud services will differ based on the needs and nature of the organization as a whole.

Smaller organizations will likely, and should, look to BI Cloud Services as a means to leverage a true enterprise-scale, analytic toolset at a fraction of the cost of an on-premise deployment. Smaller organizations will benefit from:

- Limited infrastructure (ETL only) requirements
- Business self-service capabilities, fewer technical specialists
- The ability to keep current on latest releases of software without costly upgrades

Medium-sized businesses will benefit most from speed to value. In order to adapt and keep growing, smaller businesses are often integrating data from other cloud services and altering models to react to changing market trends. The BI Cloud

Services environment can become a high-quality, adaptable data mart for key analytics.

Larger organizations should look to BI Cloud Services to augment and extend their analytic framework. These organizations likely have BI standards and on-premise deployments in place. Where these organizations often struggle is providing users with adaptable self-service analysis (such as integrating external data sets). Also, as larger organizations invest in purpose-built systems (such as Hyperion Planning and HFM), BI Cloud Services becomes a way to quickly create analytic data marts and provide unified, thin-client reporting.

Building BI Cloud Services into a BI Strategy

So often with BI tools, people try to apply them beyond their capability or intended use. Oracle BI Cloud Services is not an enterprise class BI tool like Oracle Business Intelligence Enterprise Edition. It is not a global data warehousing strategy. It does, however, provide a series of robust capabilities that can serve clients of various sizes and needs. BI Cloud Services can:

- Function as an adaptable visualization platform to compete with a Tableau or Qlikview while providing a scalable enterprise class software platform
- Become an analytic data mart to integrate islands of corporate and external data into a unified reporting platform
- Provide integrated reporting on islands of EPM data stored in Hyperion Planning, Hyperion Financial Management, and other EPM systems
- Become a prototyping and self-service analysis environment for clients with existing Oracle Business Intelligence deployments

All in all, Oracle BI Cloud Services (and similar technologies) represent the future direction of corporate business intelligence. They should become part of the strategy, but as functionality expands, direct integration increases, and performance meets the standards of on-premise systems, organizations should look to these systems as the primary arbiter of analytic data. This is the future companies should be planning for today.

ABOUT THE AUTHOR

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Mike has 17 years of experience working in the BI/EPM space. Mike has worked in the industry as well as directly for Hyperion Solutions and Oracle. He is a contributing and lead author on two books around EPM/BI technologies, and has presented at more than 20 technical conferences over the years. Mike is the former Global Domain lead for Business Intelligence (BI) and Analytics with Oracle and is currently the BI and Analytics practice Director with Huron.



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