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RESEARCH NOTE

AMAZON WEB SERVICES AND JASPERSOFT – A NEW WAY OF LOOKING AT BI IN THE CLOUD

THE BOTTOM LINE

Amazon Web Services (AWS) introduced cloud-based data warehousing, and Jaspersoft launched analytic services on the cloud in February 2013. Unlike traditional analytics projects that require initial and ongoing licensing and support, this disruptive offering has a utility-based pricing model that enables customers to effectively “pay by the drink” for analytics projects. Nucleus found early adopters were able to reduce risk, accelerate time to value for both pilot projects, and ongoing analytics operations. Nucleus found that companies moving from an on-premises analytics environment could reduce ongoing software costs by 60 to 70 percent.

Nucleus analyzed the experiences of several Jaspersoft customers to understand their experiences with Jaspersoft’s reporting and analytics software running in the cloud on AWS using Amazon Redshift; why they chose the solution, and the benefits they have gained.

THE VALUE OF THE CLOUD-BASED DELIVERY MODEL

On February 15, 2013, Amazon Web Services announced general availability for Amazon Redshift, a cloud-based data warehouse solution that was originally announced in 2012, at Amazon re:Invent (Nucleus Research *m174 - Amazon Redshift - data warehousing as a service*, November 2012). By providing data warehousing as an on-demand capability in the cloud, AWS has radically shifted the traditional concept of data warehouse economics from an expensive six or seven figure capital expenditure to a service-based operational expenditure that can be purchased for \$1998 per year for a two terabyte node with a three-year commitment.

JASPERSOFT’S UTILITY PRICING FOR CLOUD-BASED BUSINESS INTELLIGENCE

Jaspersoft was named as an Expert solution in the most recent Value Matrix for Analytics based on the wide array of functionality that it brought to end users (Nucleus Research *n197 – Technology value matrix – second half 2013: Business Intelligence/Analytics*, December 2013). From this strong base, Jaspersoft offers its business intelligence server via the cloud using several AWS services, including Amazon EC2, Amazon RDS, and Amazon Redshift. There are no user or data limits or additional fees associated with the

Jaspersoft component of this offering. The service is architected so that it allows end users to directly analyze data within the Amazon Relational Database Service (RDS) or Amazon Redshift within minutes of purchase.

To put this pricing in perspective, there are 8760 hours in a standard year, meaning that access to the Jaspersoft BI cloud platform, including hardware costs, would start at approximately \$4600 per year, and could be prorated based on business need. For reserved instances, pricing is as low as \$3400 per year. This flexibility can provide companies with a very cost-effective way to analyze large amounts of data either for short-term projects or as a test for larger deployments.

Nucleus found that software typically makes up 31 percent of the total cost of an analytics project (Nucleus Research *m135 – The magic middle: the key to analytics ROI*, October 2012). By purchasing analytic access on a needs-based and on-demand basis, Nucleus estimates that companies could potentially reduce this cost by two-thirds as developers would use only as needed rather than purchase annual or perpetual licenses.

KEY BENEFIT AREAS

In analyzing the experiences of the Jaspersoft customers running on AWS and using Amazon Redshift, Nucleus found a number of key benefits including increased productivity, faster time to value, reduced risk, and lower cost.

REDUCED COST

Jaspersoft customers cited reduced analytics-related computing costs as a key benefit from moving to the cloud. Nucleus has found that, on average, cloud projects provide 1.7 times more value than similar on-premises projects (Nucleus Research *m108 - Cloud delivers 1.7 times more ROI*, September 2012). Jaspersoft customers moving from on-premises analytics environment saw a 60 to 70 percent reduction in ongoing computing costs. That benefit was even more prevalent because of this solution's pay-by-the hour option.

Nucleus found Jaspersoft customers using AWS, moving from on-premise analytics environment to the cloud, were able to reduce their ongoing computing expenses by 60 to 70 percent.

Customers said:

- *"Jaspersoft and Amazon Redshift provides a cost effective way to provide business intelligence to all users. We only pay for what we use."*
- *"We have a really small team. We don't have to mess around with hardware, servers and software, but still get all the features and capabilities we need. We don't need a huge team to maintain a large data environment. Amazon Redshift does all that for us."*

- *"Costs were definitely a concern for us. Amazon Redshift and Jaspersoft have saved us a significant amount of money versus other solutions. Pay-as-you-go was the key value for us."*
- *"We still need to market and brand ourselves as a leading data provider with accurate timely data and metrics available to all customers and vendors whether they use it or not. With Jaspersoft, we could provide frequent users and intermittent users with access without incurring the additional costs for the infrequent users."*

INCREASED PRODUCTIVITY

Jaspersoft customers indicated the need to roll out a solution to external and internal users necessitated an intuitive, easy-to-use tool with little training required. The Jaspersoft solution met that requirement. In some cases, the external users would be infrequent users of the solution, so minimal training and intuitiveness were very important. Many of the customers had a mix of user roles; some required sophisticated business analysis capabilities while others were report consumers.

Customers said:

- *"It was a pain to access the transaction data as it was spread out around the company, in different formats and file systems. Users were having a difficult time using appropriate tools to perform their analysis. Jaspersoft and Amazon Redshift made this much easier for us. We no longer required a programmer to develop reports as users can use drag and drop to easily build dashboards, charts and reports."*
- *"Users now have one solution to use, one place to go for their information. We wanted a simple and easy to use solution that was intuitive, and didn't require a lot of training. We don't have to explain to our users how to use the solution."*

In one case, the pricing structure allowed them to provide access to all their external users, some of whom would access the system frequently, while others would not at all. The ease of use and pricing structure allowed the company to ensure that all of their external users would have access but only have to cover users' access when and if they did go on to the system.

FASTER TIME TO VALUE

The ease of implementation and packaged solution enabled these customers to have only one dedicated resource manage the system. This included configuration and preparation of the Amazon Redshift environment for data as well as managing the Jaspersoft environment for report building and data access. In most cases this work took between two and four weeks, with phase one of user testing running within 1-2 months. With a faster time to develop, one company indicated they are saving 0.25 FTEs in yearly resource costs. They estimated they will see a 70 percent savings in infrastructure and software costs versus their original on-premises environment.

Customers said:

- *"Just to provision and install a database can take a significant amount of time. Jaspersoft on AWS takes those moving parts out of the picture. All you need to do is to go to AWS, sign up, and the ability to provide users with business intelligence is there."*
- *"With Jaspersoft, we could provide frequent users and intermittent users with access without incurring the additional costs for the infrequent users."*

REDUCED RISK

All the Jaspersoft customers agreed that the lower cost of investment, and pay-as-you-go utility pricing provided a significantly reduced risk. Customers indicated they were not required to purchase hardware, additional software, web application servers, networking software, operating systems, and all the other software and components typically required to implement an on-premises business intelligence and data warehousing environment. They indicated this greatly reduced their risk both on a financial level, a corporate investment level, but also at a career level. One company indicated they would save close to \$30,000 a year on licensing and maintenance alone.

Customers said:

- *"I can stop any time. I am not locked in. This is not a career risk because I can easily back out. There is no contract. Pay per hour – with no upfront costs, and the ability to turn it off when we decide to without any financial burden was a major factor in this decision."*
- *"To get executive buy-in, we always need to justify, and do a comparative risk and benefits analysis. Traditional data warehousing projects require hardware, software, and personnel to build and maintain the environment. Amazon Redshift and Jaspersoft provides the features, security, and pricing that reduced our risk and made that internal sale much easier."*

CONCLUSION

As many of these Jaspersoft customers have indicated, the ability to provide users with an intuitive user environment, consolidated data, less overhead, and a less-restrictive and lower-cost licensing structure, drove their decision making. This technology update allows more employees gain access to analytics, and helps companies achieve the doubling of analytics adoption that Nucleus predicted for 2013 (Nucleus Research *m148 - Nucleus Top 10 Predictions for 2013*, November 2012). The cloud does not just have to consist of data storage and some basic data-centric applications. The cloud is now capable of supporting complex data environments ranging from data integration to data warehousing to data analysis in a cost-effective manner.

The companies Nucleus spoke with were all looking to improve data visualization and reporting capabilities of internal and external users in a cost-effective manner. All had more than three disparate data sources requiring significant effort to consolidate and

report on frequently. Now many have implemented processes to consolidate the disparate sources into Amazon Redshift, enabling them to provide users with reporting and analytics on an integrated view of their business data using JasperSoft. For most of these customers, this provided them with a low-risk, utility-based pricing alternative to traditional software purchasing and deployment models.

As companies learn to take full advantage of the analytics functionality that is now available with utility and subscription-based pricing options, they will be better able to seize market opportunities before their peers, benefiting from the average return of \$10.66 for every dollar spent in analytics (Nucleus Research *I122 - Analytics pays back \$10.66 for every dollar spent*, November 2011).