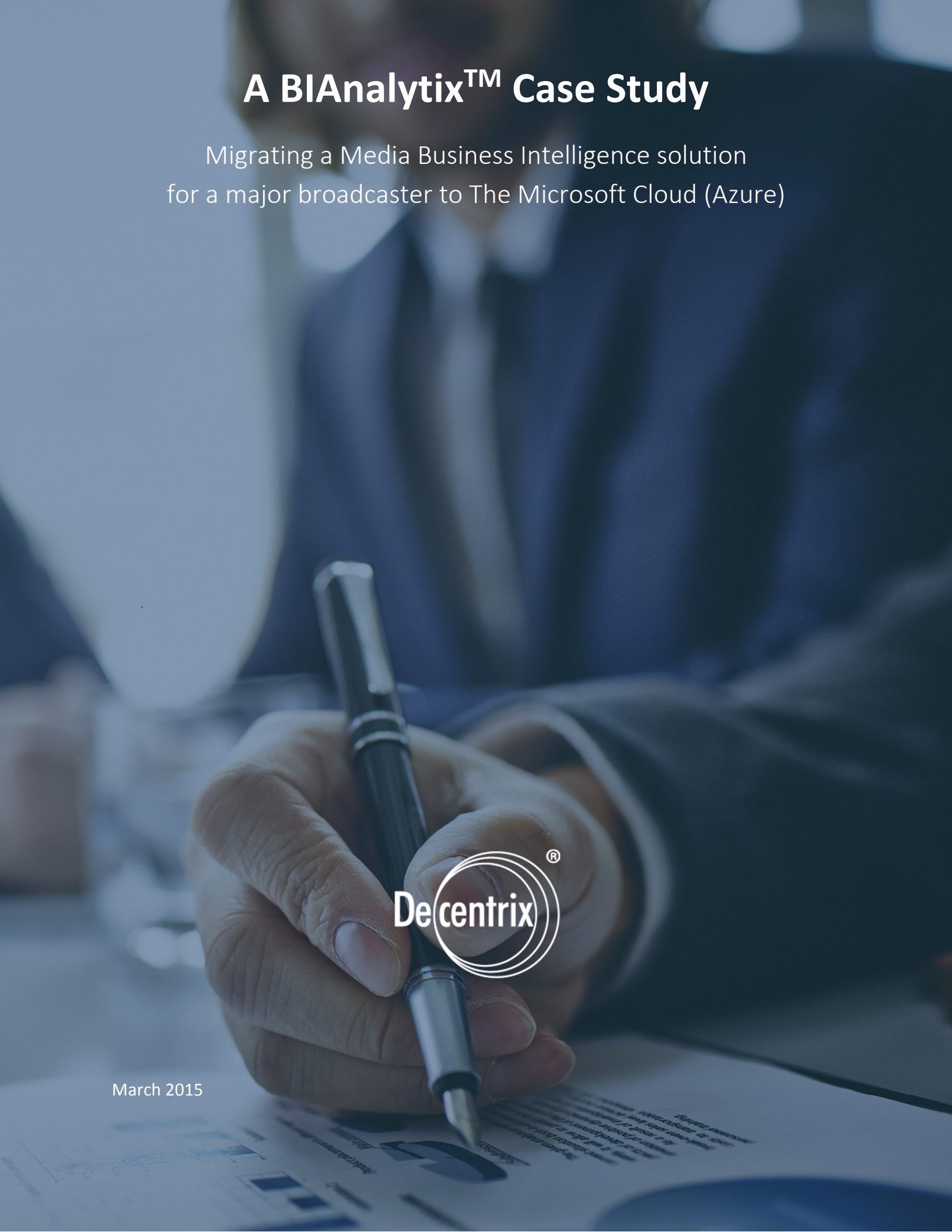
A BIAnalytix™ Case Study

Migrating a Media Business Intelligence solution
for a major broadcaster to The Microsoft Cloud (Azure)



Decentrix®

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Hearst Television, a major US based broadcasting company, benefits from elevated access to key analytics.

Hearst's on premise BI solution was comprised of data extracted from their operational traffic system to the Decentrix BIAnalytix™ data warehouse, hosted on a virtual machine. Data was processed into an Analysis Services OLAP cube hosted on physical hardware and subsequently synchronized to a SharePoint application server hosting corporate reporting. As configured, the infrastructure was not suitable for delivering data to business users by the established 6AM deadline.

Instead of investing more money in expensive on premise hardware solutions, and infrastructure to manage it, Hearst wanted to explore the viability of a cloud implementation of their existing BI solution in Microsoft Azure.

Solution

Decentrix was commissioned to migrate the existing BI solution onto an Azure cloud instance. Decentrix took a hybrid approach to shift the heavy workloads into Azure without disrupting existing business processes relying on the on premise SharePoint solution.

Decentrix stood up multiple servers, a domain controller, a data warehouse server, and a cube processing server. The domain controller was provisioned on the smallest VM available to act as the master control machine to coordinate booting and shut downs of other servers in the solution.

During the deployment phase, the data warehouse and the cube processing machine were provisioned on D14 hardware to provide maximum processing power at minimal cost. All virtual machines ran Windows Server 2012 and SQL Server 2014 Enterprise.

Now, in production, each night raw data is extracted from the operational traffic system into BLOB storage on the Azure data warehouse machine. ETL processes consume and transform the data into the desired structure for Hearst's BIAnalytix™ data warehouse, and the cube processes the aggregated data upon completion. Once cube processing is complete, a multi-threaded synchronization to Hearst's on premise SharePoint machine enables interactive analysis.

Benefits

With BIAnalytix™ in the Azure cloud, Hearst is getting data insights faster than they were when using their on premise architecture. Furthermore, Hearst now has the architectural flexibility to scale operations as data sources and volumes continue to grow.

- **Performance** - By refactoring a few pieces of the ETL process to align better with the Azure architecture, the end to end processing time for nightly work was reduced by 40%. This means more flexibility in the processing schedule to add

What is BIAnalytix™?

- Media Industry focused Data Warehouse with granular targeted data and analytics capabilities.
- Media data loaded from disparate sources including Sales, Audience, Accounting, Inventory, Digital, and third party Industry data.
- 100% Microsoft platform: Azure, SQL, SSAS, SSRS, SSIS, SharePoint, and Microsoft presentation and analysis tools.

Why BIAnalytix™?

- **Economical:** Sensible, lower cost alternative to in-house development.
- **Open:** The system can be enhanced and modified internally to align with corporate strategic directions and BI priorities.
- **Low Risk:** BIAnalytix™ offers proven, repeatable and predictable success.

For more details visit
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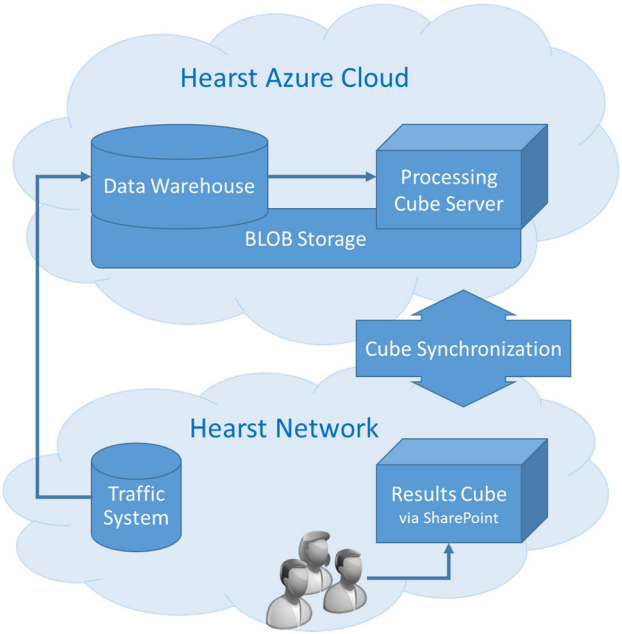
additional data for business users. At the same time, resources in Azure were utilized to their maximum capability whenever possible because the entire BI solution was on dedicated equipment.

- **Cost** - By implementing a rolling shutdown and start up routine, Decentrix was able to minimize the uptime of the servers in Azure, thus reducing overall costs. Machines were brought online at the beginning of the processing schedule and as processes and maintenance routines finished on each machine, the servers were gracefully shut down. By using this carefully managed operational technique, it's estimated that the overall cost of hardware, software, and infrastructure support was reduced by 35%.

- **Scalability** - Another key benefit gained by migrating to BIAnalytix™ on Azure is the native scalability available. Hearst can now pursue integrating other data sources because of both horizontal and vertical scalabilities afforded by Azure and the BIAnalytix™ architecture. BIAnalytix™ takes advantage of the inherent parallel capability of Azure to ensure that heavy workloads are distributed and processed efficiently. This reduces performance bottlenecks and improves throughput.

"We needed a plan to improve the performance of our analytic environment. Although I was skeptical, the results achieved by Decentrix through Azure have exceeded my expectations. The reduced processing times have been impressive, and the stage is set for future projects in the Cloud. I can't say enough good things about the team at Decentrix that made this all happen, and I am very impressed at how quickly this was completed."

Al Lustgarten
VP, Information Technology & Administration, Hearst TV



Processing is being done in Azure, but the hybrid approach enables current business users to continue without workflow impact.

By moving Hearst's current data warehouse into a Azure cloud environment, tightly coupled with Decentrix provided 24/7 Azure operational support, Hearst will now have the peace of mind that the system is being fully supported, is using latest technology enhancements, is scalable, and performs according to Hearst's current and future business requirements.

This model will also help Hearst more effectively budget for future support costs.

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