Scale Data Warehousing for Big Data and Analytics Workloads with Scholastic
About Scholastic

Scholastic (NASDAQ: SCHL) was founded in 1920 as a single classroom magazine. Scholastic books and educational materials are in tens of thousands of schools and tens of millions of homes worldwide, helping to Open a World of Possible for children across the globe. Today Scholastic is a publishing, education, and media company known for publishing, selling, and distributing books and educational materials for schools, teachers, parents, and children. Products are distributed to schools and districts, consumers through the schools via reading clubs and fairs, and through retail stores and online sales. The business has three segments: Children Book Publishing & Distribution (Trade, Book Clubs and Book Fairs), Education, and International.

Scholastic also publishes instructional reading and writing programs, and offers professional learning and consultancy services for school improvement. Fun fact - Clifford the Big Red Dog serves as the mascot for Scholastic.
Their Challenge

Scholastic personified a near universal need for large corporations to “Teach Old Data New Tricks™”. Scholastic ran its business on old IBM AS/400 technologies (initially launched in 1988) and Microsoft SQL Server. Prior to their engagement with NorthBay, Scholastic had over 5,500 AS/400 workloads and more than 350 SQL Server workloads performing their Big Data and Analytics work. These systems grew over a 20-year period, and like most systems of that vintage, were rife with problems. They were expensive to run, unable to keep up with the business needs, and inflexible.

Scholastic knew they needed to evolve, and decided to evaluate how they could use Amazon Web Services (AWS) to evolve their Big Data and Analytics workloads. They evaluated multiple AWS Partner Network (APN) Consulting Partners, and chose to engage with NorthBay to help them meet their objectives.
The Solution

NorthBay, AWS and Scholastic decided on a 3-month pilot project that had three main goals:

1. Deliver multiple AWS analytics workloads to the business sponsors as a proof of concept (POC) to demonstrate that the business would get better information/knowledge to run their business.
2. Stand up the AWS environment to allow Scholastic IT to understand and gain comfort with AWS.
3. Teach Scholastic best practices to utilize and succeed with the new AWS environment.

The pilot goals were all realized, and NorthBay then engaged with Scholastic to implement a longer-term solution on AWS.

Scholastic senior management had authorized funding to kick off a project originally scheduled for 36 months, which was then compressed to an 18-month sprint, to implement the full AWS environment and decommission the IBM centric environment. The goal was to provide Scholastic with substantial cost savings, and to provide better decision making tools a full 18 months ahead of schedule.

The Scholastic project utilized a broad array of Services on AWS, including AWS Data Pipeline, Amazon Elastic Compute Cloud (Amazon EC2), Amazon Relational Database Service (Amazon RDS), Amazon Redshift, Amazon DynamoDB, Amazon CloudWatch, Amazon Simple Notification Service (Amazon SNS), AWS Lambda, Amazon Virtual Private Cloud (VPC), AWS Identity and Access Management (IAM), Amazon Simple Storage Service (Amazon S3), and Amazon Elastic MapReduce (Amazon EMR).
The NorthBay Solution & Associated Benefits

With the use of NorthBay’s One Team Model, Scholastic collapsed a 3+ year time frame down to 18 months, with a significant cost reduction in the migration process. Scholastic now has the ability to scale their data warehouse as they add data from new business units, regardless of the data type (structured, semi-structured, and unstructured). Scholastic’s new cost efficient cloud based architecture provides self-service to business end users instead of solely IT, streamlining their data analytics process. In addition, the quality of the reports Scholastic generates has improved with the many new tools they have to choose from for visualizing and accessing the data warehouse. With NorthBay on AWS, Scholastic now has a secured end to end framework for their work streams.
Conclusion

By engaging with NorthBay to build a comprehensive solution on AWS, the Scholastic team has evolved their Big Data and Analytics capabilities, and have experienced a number of benefits, including cost savings, scalability, and the successful implementation of a robust DevOps methodology. With all the benefits NorthBay has provided, Scholastic has been able to develop trust with the business end users and key stakeholders to further enable better architectures for other use cases.

About Amazon Web Services (AWS)

For 10 years, Amazon Web Services has been the world's most comprehensive and broadly adopted cloud platform. AWS offers over 70 fully featured services for compute, storage, databases, analytics, mobile, Internet of Things (IoT) and enterprise applications from 35 Availability Zones (AZs) across 13 geographic regions in the U.S., Australia, Brazil, China, Germany, Ireland, Japan, Korea, Singapore, and India. AWS services are trusted by more than a million active customers around the world – including fast growing startups, large enterprises, and leading government agencies – to power their infrastructure, make them more agile, and lower costs. To learn more about AWS, visit [http://aws.amazon.com](http://aws.amazon.com).