How a Large Global Professional Services Network Deploys Natural Language Generation

Deloitte increases client value and reduces time-to-insight with Quill by Narrative Science

Deloitte US is a large professional services firm employing over 84,000 people worldwide. Deloitte’s practitioners provide audit and assurance, consulting, tax, risk, and financial advisory services to 80% of the Fortune 500 and more than 6,000 private and middle market companies across 20 industry sectors.

As a large company, Deloitte often faces data overload: access to multiple, very large data sets without the time and resources to fully analyze that data for meaningful recommendations. Company leaders often must move quickly to make decisions based on data findings – a process that can often require manual or semi-manual data aggregation and analysis.

Adding to the need for quick data analysis are the needs of Deloitte’s clients, who often approach Deloitte with a desire to innovate their businesses. Automating manual, time-intensive processes to derive insights from large data sets, or using data to create new ways to engage with rapidly-changing consumer bases, adds value for Deloitte’s clients. In order to show value to clients quickly, timelines are often tight.

The decision to use Quill by Narrative Science

Narrative Science, an Amazon Web Services (AWS) Machine Learning Competency Partner, created a Natural Language Generation (NLG) platform, Quill, that interprets large data sets meaningfully and in context. The company came to the attention of Deloitte’s decision makers due to its expertise in the NLG industry.

“Quill can generate sophisticated, customized narratives from large data sets, and Narrative Science’s in house NLG experts are dedicated to creating solutions at the scale and specificity our customers require,” says Sheetal Parikh, Senior Manager of Innovation for Deloitte. “Deloitte engages with a number of infrastructure and cloud providers, but AWS is a name trusted by Deloitte’s IT department and clients. They provide robust, elastic infrastructure at a fraction of the cost of physical servers. Those factors led to our decision to engage Narrative Science and AWS.”

Quill by Narrative Science

- Natural Language Generation (NLG) for interpreting data sets and meaningfully communicating data insights at scale.
- Analyzes and writes like a human.
- Generates data-driven narratives in the style, tone, and language of your business.
- Empowers enterprises to make better decisions, focus talent on higher-value opportunities, create new or differentiate existing products, and realize untapped potential of their data.

Challenge

Derive meaning from large data sets at scale to streamline data analysis, interpretation, and communication, and enhance client solutions for a large consulting firm.

Solution

Quill by Narrative Science, an NLG platform hosted on AWS, frees up employees from data analysis, interpretation, and reporting activities to focus on higher value, more strategic work by enabling companies to turn their data into easy-to-understand, insightful narratives. Quill directly improves a company’s operational efficiency, enhances customer experiences, and helps meet compliance requirements.

Results

Using Quill, the consulting firm was able to realize six figures in savings from streamlining internal processes alone, and is currently planning additional internal deployments as well as developing NLG solutions for its clients.
Using Quill, Deloitte automates existing internal manual analysis and reporting processes. Quill also helps the company scale and improve customer communication for a variety of clients. Deloitte has brought its own industry expertise and deep knowledge of system and workflow integration to create a full end-to-end solution using NLG for its clients. AWS provides the cloud infrastructure that allows Deloitte to quickly spin up and deploy secure NLG solutions to its clients.

**Narrative Science, Deloitte, and the AWS Machine Learning Competency**

Narrative Science was named an inaugural AWS Machine Learning Competency Partner in 2017, but the company’s relationship with AWS extends back to 2010 when Narrative Science first chose to run Quill on AWS. The company chose AWS to host its cloud-based NLG platform because of the reliability, scalability, and flexibility of both its cloud-based infrastructure and its native data analysis and machine learning services, as well as machine learning and serverless services, including AWS Lambda.

The invitation to join the inaugural group of AWS Machine Learning Competency Partners was based on an in-depth technical evaluation of Quill and its ability to offer AWS customers the ability to glean more insight into their data with greater scalability and agility. Admittance to the program signifies that Narrative Science has built solutions for AWS customers, including Deloitte, that help them solve their data challenges by allowing them to transform data into actionable and powerful assets while maintaining data integrity and security.

**The benefits for Deloitte**

With Narrative Science and AWS, Deloitte is able to build quality, custom NLG solutions for its clients, helping them to automate existing reporting processes or derive new insights from data. Deloitte is able to quickly deploy solutions on AWS, cutting down on time to delivery. Deloitte has been particularly impressed by the ease and speed with which new AWS environments can be deployed. Deloitte’s AWS environment includes an ETL (extract, transform, and load) solution to bring data into Quill, a custom Quill configuration hosted on AWS, and an accompanying workflow integration engineered by Deloitte.
Narrative Science and AWS have enabled Deloitte to increase internal efficiency, and to scale consultative customer engagements both for the firm and its clients. AWS allows Deloitte to decrease time to market while continuing to ensure secure hosting for sensitive data. Deloitte’s use of AWS reduces the time needed to implement and deploy a Narrative Science solution from weeks to days.

“A massive amount of time and effort has been spent in gathering data and no human can look at all of it. Narrative Science offers us opportunities to more efficiently sift through large amounts of data and bring out insights more quickly.”

Craig Muraskin
Managing Director of Innovation, Deloitte

*Source: Forbes.com

The benefits to Deloitte have been tangible, and quick to realize. Deloitte’s use of Narrative Science’s NLG platform has already resulted in savings of more than half a million dollars for the firm’s internal operations. As of this writing, Deloitte is planning to deploy three additional NLG solutions internally in the coming months.

ABOUT NARRATIVE SCIENCE

Narrative Science is a leader in natural language generation for the enterprise. Its Quill platform analyzes data from disparate sources, understands what is interesting and important to the end user, and then automatically generates perfectly written narratives for any intended audience, at unlimited scale. A diverse range of companies such as Deloitte, USAA, MasterCard, and the U.S. Intelligence community utilize Quill to increase efficiency through the elimination of time consuming, manual processes related to analyzing data and communicating insights, freeing employees to focus on high value activities and better serving their customers. Narrative Science is an AWS Machine Learning Competency Partner. Learn more about Narrative Science on AWS.