Nominee: BMJ/Datapipe

Nomination title: Building the Foundations to Enable Change at BMJ

Introduction

BMJ started out over 170 years ago as a medical journal. Now as a global brand, BMJ have expanded to encompass 60 specialist medical and allied science journals with millions of readers, and have used Datapipe to help initiate a radical change within their organisation.

Datapipe is a leading managed cloud services provider and works as a trusted partner to companies across the globe that are making their transition to the cloud and BMJ came to Datapipe in early 2015 to help them virtualise their infrastructure. The cloud project had a bigger impact than just the physical infrastructure, initiating a culture change throughout the organisation that has led them to embrace the DevOps way of working. More than this, this culture spread out from the IT department into other areas of the organisation.

The driving force behind the project

As BMJ expanded, commissioning new sites, applications and features and moving to new territories, it became apparent that the infrastructure supporting the application release process was no longer fit for purpose. BMJ made a conscious decision that it needed to incite radical change. With the technology department's focus being on releasing new products to market, they had little time to go back and revise the architecture. Having become a 24/7 organisation, BMJ's products were becoming international in profile. The capacity for allowing downtime, scheduled or otherwise, was diminishing.

The ambition for BMJ's operations team was to move to a fully automated, shared-nothing architecture where each product would have its own set of application and database servers, and where code and files could be reliably deployed to each application server. They needed to move to a sustainable development cycle of continuous integration, as well as a trusted partner to get the infrastructure in place to create the foundations for real change.

How did the solution address the challenge?

By the end of the move, BMJ was fully virtualised, with over 200 virtual machines running its applications 24/7 in a private cloud infrastructure. Importantly, the change was completed with zero down-time, so BMJ's customers were not affected. The company also saw incredible efficiency improvements as the move to cloud architecture created a seamless release process, improving from around one product update a month to up to three a day.

Major challenges that were faced during the project

The 24/7 nature of BMJ's operations created an important challenge for Datapipe. BMJ needed a service that was reliable and efficient, with the international scale of their expansion needing a flexible, agile and maintenance-free solution. Datapipe also needed to be able to adapt to the BMJ way of working. Some vendors draw a line - you're either fully managed or not at all - but Datapipe had the flexibility, maturity and the experience to work BMJ's way.

Tangible benefits

This process of moving infrastructure became the lever that could bring cultural change to the organisation and cement a new DevOps way of working.

In the process of automating, the interdependencies were managed or removed and the processes were understood, freeing up time to push out more new products and solutions and reducing the time required to release new features.

For instance, BMJ has moved from delivering content to third parties via weekly batch transfer jobs to creating an API to allow the content to be pulled and services to then be built around the infrastructure.

Importantly, this is setting BMJ up for even greater success in the future. BMJ considers this only as phase one of its infrastructure overhaul. The next step is to explore moving workloads to the AWS public cloud.

Conclusion

BMJ has seen extraordinary change in its time. Recently, it has transitioned from traditional print media to digital content provider. With Datapipe's help, it now has the infrastructure and culture in place to allow it to grow its business worldwide and is well placed to take advantage of technology like the public cloud to cement its position as a premier digital publisher and educator.

Why nominee should win

• Cloud technologies transformed the service infrastructure that underpins a significant part of BMJ infrastructure and drives revenue generation.

• Cloud and managed service options, and the trusted partnership with Datapipe, mean BMJ Technology staff focus on what they do best, building code and intellectual property.

• Brought Dev and Ops together to define and build the service, cementing BMJ's growing DevOps culture.

• Automation process improved the efficiency of operations - from operating multiple black boxes to seeing everything under a single pane of glass.

• Collaboration between Datapipe and BMJ's Dev and Ops teams meant no down-time for customers while services were moved.