

# CASE STUDY



Building the foundations  
to enable change

**ORGANISATION:**

The BMJ, formerly known as The British Medical Journal, is one of the world's oldest general medical journals, with a history that goes back over 170 years. In the course of its history, BMJ has expanded to encompass 60 specialist medical and allied science journals with millions of readers.

**CHALLENGE:**

Moving to a sustainable development cycle of continuous integration and automation

**SOLUTION:**

Datapipe's Infrastructure-as-a-Service



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# CREATING A NEW CULTURE WITH DEVOPS

## THE CHALLENGE

The BMJ, formerly known as The British Medical Journal, is one of the world's oldest general medical journals, with a history that goes back over 170 years. In the course of its history, BMJ has expanded to encompass 60 specialist medical and allied science journals with millions of readers.

Now a global brand with a worldwide audience, BMJ helps medical organisations and clinicians tackle today's most critical healthcare challenges. It does this through its digital platform, publishing cutting edge academic research, providing professional development solutions, and creating clinical decision support tools.

BMJ's infrastructure grew organically as new sites, applications and features were commissioned – and it became apparent that the infrastructure supporting the application release process was no longer fit for purpose. So BMJ made a conscious decision early on that it needed a new approach.

"In a way, we were victims of our own success," explains Alex Hooper, Head of Operations, BMJ. "The Technology Department's focus was on getting the cool new stuff to market and there was little time to go back and revise the architecture. And as our

infrastructure grew; so did our technical debt. An expiring hosting contract and the subsequent review of hosting providers gave us an opportunity to pay off that technical debt and to design for the future."

On top of the infrastructure challenge, BMJ has become a 24/7 organisation in recent years. Its products were moving towards becoming international in profile, so the capacity for allowing downtime – scheduled or otherwise – was diminishing.



“We had unwritten SLAs with the business stakeholders,” says Sharon Cooper, Chief Digital Officer at BMJ. “They wanted to be able to call the operations team directly. We needed to formalise our support schedule and reduce our reliance on key support team members.”

The real challenge was with the culture and how to move to a sustainable development cycle of continuous integration and automation. To do that, BMJ needed a trusted partner to get the infrastructure in place to create the foundations for real change. BMJ was used to being in control, and keeping everything in-house, so it needed a true partnership with the selected managed service provider (MSP) – one that could work within its specific requirements and one that goes above and beyond in what it delivers.

### **ENTER DATAPIPE**

The RFP for a new supplier was BMJ’s signal, both internally and externally, that it wanted to initiate radical change.

When it started looking for a new managed service provider, BMJ drew up a list of 15 vendors, which was then narrowed to a shortlist of three. These managed service providers were asked to complete a short task to demonstrate their expertise and commitment.

“Datapipe was the only provider that stepped up and completed our challenge successfully. It set the foundations of a fruitful working partnership,” Hooper explains.

“We wanted someone with the whole package; someone we felt we could work in partnership with. Datapipe had managed AWS; they did hybrid clouds; they could help us expand into China and they had the adaptability to work with us in the way we wanted. Some vendors draw a line - you’re either fully managed or not at all, but Datapipe had the flexibility and the know-how to work BMJ’s way.”

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.

More than this, the process of moving infrastructure became the lever that could bring cultural change to the organisation and cement in place a new DevOps way of working.

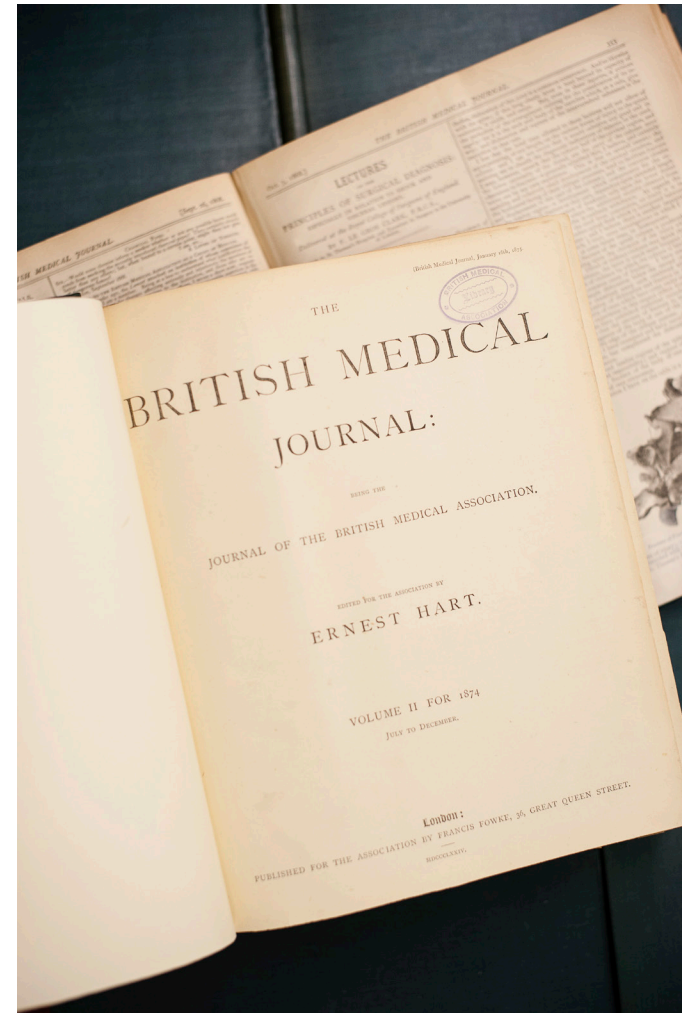
“We went from an old way of developing systems to an agile environment,” says Hooper. “Some of the problems we had were with automation, but we knew that to truly solve our problems, we needed the right infrastructure to underpin it.

## THE SOLUTION

Of all the potential partners BMJ spoke with, only Datapipe was able to deliver on what it promised. That drive and ability to achieve the company's vision were key components in the success of the project. 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. The biggest change, however, was in the release cycle and the efficiency improvements that came with virtualisation.

"For us, it's all about efficiency. Previously we were lucky to do one release a month. Now we do up to three a day," Hooper explains. "In the past, you could tell in the office when a release was going on - people were on tenterhooks waiting for something to break. Now a new release is uneventful and commonplace. We don't want fireworks when we implement new releases. We want a seamless process."

Automation was a key deliverable. In the process of automating, the interdependencies were managed or removed and the processes were understood, which freed up time to move more new products and solutions. 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.



# OPERATIONAL IMPACT

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## RESULTS & BENEFITS

- Change was completed with zero downtime
- BMJ now has the infrastructure and culture in place to grow its business worldwide
- Well placed to take advantage of technology to cement its position as a premier digital publisher and educator
- Now in position to move workloads to public cloud

This move sets 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.

“Now that we are fully virtualised and automated we can look at the AWS piece from a place of relative comfort,” says Hooper. “We can take it one step at a time without relinquishing control. Eventually we would like a lot of the front end to be in AWS and the back end, such as our access control systems, to be in the private cloud.”

“Datapipe delivered the infrastructure we needed to initiate a change of culture within our organisation,” adds Cooper. “They worked closely with us and offered a professional combination of listening to our needs and giving advice to my team. Most importantly, we completed the change with zero-downtime, so our customers were not affected.”

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.

# ***DATAPIPE***

A next generation MSP, Datapipe is recognised as the pioneer of managed services for public cloud platforms. Datapipe has unique expertise in architecting, migrating, managing and securing public cloud, private cloud, hybrid IT and traditional IT around the globe. The world's most trusted brands partner with Datapipe to optimise mission-critical and day-to-day enterprise IT operations, enabling them to transform, innovate, and scale. Backed by a global team of experienced professionals and world-class interconnected data centers, Datapipe provides comprehensive cloud, compliance, security, governance, automation and DevOps solutions. Gartner named Datapipe a leader in the Magic Quadrant for Cloud-Enabled Managed Hosting.

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