rackspace

myBeepr simplifies secure communication between doctors

As hospitals strive to improve patient care and outcomes, this Australian SaaS provider helps doctors, nurses and administrators coordinate patient care quickly and securely.

Our customer

myBeepr is a highly customisable, secure, real-time team collaboration platform used to improve the way doctors communicate in hospitals.

The obstacles they faced

To make its platform suitable for hospital environments, myBeepr needed assistance complying with stringent industry security requirements within a SaaS-based environment, whilst maintaining a single cloud platform.

How we helped

Managed Hosting — Rackspace Service Blocks, Managed Infrastructure as Code (IaC) deployments; Rackspace Managed Security — Security and Compliance as a Service, Managed Public Cloud — Fanatical Support® for Amazon Web Services (AWS)

What we achieved together

myBeepr reduced the burden on hospital switchboards by reducing the time taken to close the communication loop by almost 18 and a half minutes — from 22.78 minutes down to 4.30 minutes.

myBeepr

"We started this initiative to solve a shared pain point relating to communication in healthcare. It was surprising to see that they still rely quite heavily on pages and fax machines. It's slow, it's inefficient, and it's fragmented. myBeepr turned to Rackspace to help transform this process securely at scale."

Krupa Bagani
Co-Founder & COO, myBeepr

Communication across the healthcare industry is vital to improving patient care and outcomes. With over 11 million admissions to hospitals each year in Australia (up 3.8% year-on-year), the number of patients in both public and private hospitals is only set to grow alongside Australia's ageing population. In 2017-2018, those aged 65 and over accounted for 42% of hospitalisations in Australia.*

Traditional communication methods in hospitals have typically not kept up with the medico-legal risks and potential for data breaches, which can lead to a reduction not only in clinical quality, but in economic viability and reputation, also.

myBeepr was founded in 2016 as a communication platform designed specifically for healthcare. The myBeepr team recognised communication in healthcare as one of the most important factors determining efficient and safe patient care. Built by doctors for doctors, and backed by Avant, Australia's largest medical indemnity provider, myBeepr is a highly customisable, secure, real-time team collaboration platform.

It provides a modern solution to the outdated pager infrastructure in hospitals, which can clog up hospital switchboards and result in the loss of crucial information in the communication flow.

Data security and privacy, particularly the sharing of patient health information between healthcare professionals, is an increasingly important priority among hospital CIOs and IT departments. Because it was dealing with sensitive patient and hospital data, in addition to stringent industry compliance and regulatory requirements, myBeepr needed a cloud partner with the right security credentials to support its software-as-a-service (SaaS)-based application.

Protecting patient data in the cloud

In order to manage and defend against security threats in a hosted environment, myBeepr needed a cloud partner. The team wanted a particular focus on delivering SaaS applications to take the burden of on-premises hosting and data management away from the hospitals.

To this end, myBeepr chose Rackspace to manage the integration of their application into a multi-tenant configuration offered as a SaaS solution on Amazon Web Services (AWS). Rackspace modernised the platform to

enable secured access to the service whilst protecting client confidential data.

Smartphone and instant messaging is prevalent in the healthcare industry as a way for healthcare professionals to correspond and share patient health information. myBeepr interviewed hundreds of doctors across NSW and Victoria about their device use, demonstrating they are unequivocally reliant on WhatsApp, with 84.5% using it to transfer patient health information. This classified information consists of medical records that can be used to identify an individual, and there is an inherent security issue in sharing these files via smartphones and general applications.

This needed to change immediately to comply with Australian Privacy Principles and HIPAA. myBeepr needed data storage in the cloud and in the device, which could be encrypted in transit and at rest.

A revolutionary approach for a traditional problem

In its quest to revolutionise communications for healthcare professionals in Australia, myBeepr turned to Rackspace. Using AWS, Rackspace was engaged as the technical partner with the capabilities and security credentials to support myBeepr in its mission to modernise hospital communications technology.

Speed to market was a crucial factor for myBeepr and working with Rackspace allowed the team to accelerate the workload process and de-risk the product launch. With a heavy emphasis on user engagement and satisfaction during launch, myBeepr spent six months optimising the application's performance, message-delivery speed and security and encryption capabilities.

"myBeepr's secure messaging application for doctors, with Rackspace's expertise, has been able to speed up communication, improve care-team collaboration and safeguard highly sensitive patient data, ultimately reducing the communication breakdown in hospitals."

Krupa Bagani
Co-Founder & COO, myBeepr

Rackspace services and expertise across its teams allowed myBeepr to focus on growing the platform while leaving the complex technical cloud requirements to Rackspace. myBeepr leveraged Rackspace best practices coupled with the AWS Well Architected Framework to provision a highly available and scalable infrastructure.

Rackspace was able to provide security and compliance services, as well as Rackspace Service Blocks, Managed Infrastructure as Code (IaC) deployments and expanded multi-cloud capabilities to enable management from a single cloud platform on AWS.

As part of the engagement, Rackspace was able to demonstrate its expertise in AWS by designing multiple solutions for the myBeeper application. This was to ensure the myBeeper application was not restricted to a single solution and having the possibility to use PaaS solutions.

In addition to the deployment of the infrastructure, Rackspace engaged its security partner to perform extensive penetration testing across both the myBeeper application and its infrastructure. This ensured the myBeeper application has more than just the industry standard security stature.

"We started this initiative to solve a shared pain point relating to communication in healthcare," said Krupa Bagani, Co-Founder & COO of myBeepr. "It was surprising to see that they still rely quite heavily on pages and fax machines. It's slow, it's inefficient, and it's fragmented. myBeepr turned to Rackspace to help transform this process securely at scale."

Communication as a tool to determine efficient and safe patient care

myBeepr was successfully piloted within Sydney Local Health District at Concord Hospital. Following Rackspace best practices for data retention and disposal, system monitoring, and business continuity and disaster recovery planning, myBeepr was able to leave the security and infrastructure details to Rackspace while it focused on delivering outcomes for doctors and patients.

The pilot achieved 100% user uptake amongst eligible participants. myBeepr reduced the burden on hospital switchboards by reducing the time taken to close the communication loop by almost 18 and a half minutes — from 22.78 minutes down to 4.30 minutes.

Rackspace's cutting-edge infrastructure services is helping us change the future of health technology in Australia."

Krupa Bagani – Co-Founder & COO, myBeepr

After the twelve-month pilot commenced, no users reverted to WhatsApp. myBeepr also achieves 99.98% uptime with Rackspace.

"We deal with sensitive patient data and there's no room to make mistakes," said Bagani. "Because of this, uptime and secure data transference is critical for hospitals. But when you're scaling rapidly — like myBeepr has been — it's hard to address this internally. Fortunately, we were able to rely on Rackspace's expertise in that space."

A future-proofed approach to scaling

Rackspace strives to deliver modern IT as a service for its customers through Fanatical Experience™ and agile delivery of IT wherever customers are on their journey to the cloud. Collectively, these new solutions represent a major shift in the IT as-a-service market, changing the way organisations purchase and manage their public cloud.

myBeepr is set to grow extensively over the coming years, and can scale at pace through Rackspace capabilities and expertise.

"Since the initial pilot at Concord Hospital, myBeepr is growing at a significant pace within Australia," said Bagani. "There have been nineteen approved or completed pilots, a total of fifty-seven hospitals engaged and thirteen planned hospital implementations in the next six months. myBeepr is on track to become Australian Healthcare's most widely adopted communication platform."

*According to the Australia Institute of Health and Welfare

About Rackspace

At Rackspace, we accelerate the value of the cloud during every phase of digital transformation. By managing apps, data, security and multiple clouds, we are the best choice to help customers get to the cloud, innovate with new technologies and maximize their IT investments. As a recognized Gartner Magic Quadrant leader, we are uniquely positioned to close the gap between the complex reality of today and the promise of tomorrow. Passionate about customer success, we provide unbiased expertise, based on proven results, across all the leading technologies. And across every interaction worldwide, we deliver Fanatical Experience™. Rackspace has been honoured within the top 100 Great Places to Work for more than a decade.

Learn more at **www.rackspace.com** or call **+852 3752 6488**.