



# MHI and Cloudwick Generate Data Insights to Help Save Lives Using AWS

## Executive Summary

Mental Health Innovations has gathered anonymized data on UK mental health through its Shout service, which has been used by three-quarters of a million people since 2018. Its existing technology capabilities meant it couldn't extract the business intelligence it needed to refine its services, train its staff, and generate valuable insights for its healthcare network into the state of mental health in the UK. It sought the expertise of AWS Partner Cloudwick Technologies to build its data and insights capability using the Amorphic Data Cloud. Today, it generates insights that have helped the organization to improve decision making, become more efficient and more effective and, ultimately, save lives.

## Breaking Down Data Silos for Better Business Intelligence

[Mental Health Innovations](#) (MHI) operates Shout, the UK's first free 24/7 text messaging support service for anyone struggling to cope with mental health issues. Launched in 2018, Shout has had more than 2 million text conversations with people seeking support because they are feeling anxious, stressed, depressed, suicidal, or overwhelmed. With 2,500 active volunteers and 1,500–2,000 conversations every day, MHI has a longer-term aim to develop other mental health services.

The organization needed a secure, reliable, and scalable system to store, manage, and anonymously analyze the data those conversations generated. With its data organized in silos, it needed a holistic platform to generate business intelligence to improve its services, and to provide mental health data insights to academic researchers. "We've been generating a lot of data since 2018, but wanted to boost our ability to capitalize on the data in terms of insights," says Mark Ungless, director of data insights at MHI. "We needed a robust data environment where we could do all the types of analyses we needed."

MHI also needed to analyze and understand the data from Shout text conversations to provide vital training and insights to its volunteers. Because many of the people who use Shout are in crisis, it was critical to ensure that volunteers could provide the right kind of support.

## MENTAL HEALTH INNOVATIONS

### About the customer

Mental Health Innovations is a digital charity that uses technology to create innovative solutions for mental health challenges, and generates insights to increase the healthcare sector's understanding of mental health in the UK. The charity wants to use the power of technology to reach the millions of people, especially young people, who feel isolated and alone, and help them to find the right place to find support.

### AWS Services Used

- [Amazon Redshift](#)
- [Amazon QuickSight](#)
- [Amazon SageMaker](#)

### Benefits

- Streamlined training using Amazon QuickSight
- Used data trends to intervene in 9,500 crises
- Analyzed data from over 750,000 interactions
- Achieved rapid delivery and quick access to data
- Gained auditable security, control, and governance

MHI saw demand for Shout's services grow significantly during the early stages of the COVID-19 pandemic, when stay-at-home orders in the UK prohibited people from going outdoors except for daily exercise, work travel, and essential services. News reports about well-known people experiencing mental health crises also caused the number of people contacting Shout to spike. High demand made it harder for MHI to manage and use its Shout data effectively. Realizing that it needed a better infrastructure to support its service, MHI turned to [AWS Partner Cloudwick Technologies](#) for help.

## Harmonizing Data through a Single Platform

One of the key reasons for choosing Cloudwick as its data analytics partner was that MHI needed external capability to develop business intelligence tools to match its business requirements.

Working remotely because of the COVID-19 restrictions, Cloudwick conducted a discovery exercise to assess MHI's technology needs, especially its need for data security, privacy, and governance. Cloudwick then delivered an MHI-specific pilot of its Amorphic Data Cloud solution for self-service on Amazon Web Services (AWS). Amorphic seamlessly integrates with and orchestrates more than 72 AWS services, making it possible for users to manage their AWS data and analytics workloads from a single self-service interface.

Cloudwick delivered the pilot for MHI over a period of 6 weeks. This exercise demonstrated how MHI could use Amorphic to gain greater insights from its data, while also managing and storing data securely, protecting data privacy, and sharing vital insights with volunteers and researchers. The project ingested a small selection of MHI's datasets into [Amazon Redshift](#), which helped users break through data silos and gain holistic insights in a few clicks. With the pilot, MHI was also able to use [Amazon QuickSight](#), due to its integration with Amorphic, to gain unified business intelligence at scale.

MHI concluded that the pilot met its success criteria and decided to deploy Amorphic for all of its data needs. Cloudwick then transitioned the pilot into a production platform in under 4 weeks, using the foundation that it had already developed. Cloudwick has worked with MHI over the last 4 years to evolve the organization's use of data and insights to support the development of its use cases and today continues to support MHI with managed services on AWS with Amorphic. "The solution Cloudwick built for us is really good because it gives us the opportunity to take advantage of so many things AWS provides," says Ungless. "Our team can access these facilities and do a broad range of valuable work."

## New Data Insights Trigger 9,500 Crisis Interventions for Shout Users

Using its new system, MHI can gain many more insights than before from its data. It can analyze text conversations with users based on keywords, times of conversations, types of crises, and more. MHI has also started using [Amazon SageMaker](#) to build, train, and deploy machine learning models. All of this is helping the organization to better understand the needs of every Shout user, help volunteers provide the right kind of support, and improve the ability to intervene if a Shout user is in imminent danger. To date, MHI has used its system to identify and de-escalate over 9,500 cases where people's lives are at risk.

Using natural language processing, the company was also able to uncover fresh data insights into mental health coping mechanisms from hundreds of thousands of data points drawn from text interactions with users—information that would have been hard for humans to analyze. This led to the creation of a widely accessed consumer resource, released jointly with the UK football Premier League. "Our data enables us to support more people than ever," says Ungless.

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**Mark Ungless,**  
Director of Data Insights,  
Mental Health Innovations

**"We had a lot of support from Accenture and AWS from the start. AWS made clear suggestions on how to save money too."**

**Mark Ungless,**  
Director of Data Insights,  
Mental Health Innovations

MHI is also using data analysis to improve the training and retention of its volunteers. “Data that was previously siloed is now showing us how Shout volunteers are progressing through training, as well as outline their experience with the organization,” says Ungless. “This is really useful, as it gives a 360-degree view of their experience, so we can offer targeted support, and get insights into any pain points on the platform.”

With managed services from Cloudwick, MHI also knows that it can handle its data and analytics needs for a fixed cost. This helps the nonprofit with budgeting, budget forecasts, and cost optimization. It can also demonstrate to stakeholders that it is continuously working to find efficiencies and add value. “By using data insights to streamline our training, we have shown we can keep costs down and ultimately help more people,” says Ungless. Using Cloudwick’s managed services on AWS, MHI has also maintained 100 percent availability over the past 4 years, seen all of its service level agreements (SLAs) met, and knows it has access to responsive support.

MHI has a research partnership with London’s Imperial College. With its new platform, collaboration has improved due to the ease of setting up identity access management. “This was very complex to do before,” says Ungless. “But now researchers can be granted temporary access to certain data, such as using machine learning to predict demand for our service reliably and securely without compromising privacy—it’s a dramatically better user experience.”

MHI and Cloudwick continue to work together to evolve the platform, and are now looking at expanding the use of generative artificial intelligence. “It’s been vital that we’ve been able to have this ongoing relationship with Cloudwick, which also helps with hands-on training and recommendations of what we can explore next,” says Ungless.

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Director of Data Insights,  
Mental Health Innovations

## About the AWS Partner

Cloudwick is an AWS Partner and Technology Software Partner offering agile, innovative, and cost-effective cloud data management and analytics solutions on AWS. Founded in 2010 in Newark, CA, Cloudwick has earned six AWS competencies and has over 210 AWS-certified technology professionals serving customers across North America, EMEA, and APAC.

