



### **Customer Case:** Hato Hone St John and Omda Readiness

Hato Hone St John provides emergency response and healthcare services to approximately 90% of the population across almost all of New Zealand's landmass. Delivering services via 1,600 paid employees and 2,300 volunteers, Hato Hone St John answers around 500,000 emergency calls a year, responding from over 200 stations around the country.

Having adopted Omda Readiness in 2010, Hato Hone St John has more than a decade of experience utilising the platform. To learn more about how Omda Readiness benefits the organisation, we spoke to Dave Richards, General Manager of Ambulance Operations at Hato Hone St John, James Coe, Omda's Customer Success Manager for Australasia, and Kamal Patel, a Omda Senior Business Analyst working with Hato Hone St John.

#### Meeting day-to-day emergency service delivery targets

"We give customers a process for answering resourcing questions. And that gives them confidence in their decision-making. Decisions are based on a mathematical model built by people with real expertise. Those decisions are defensible."

- James Coe



At its core, Omda Readiness enables Hato Hone St John to make data-driven decisions regarding resource optimisation and strategic planning. From determining ambulance station locations to refining staff shift patterns, the platform is central to ensuring the organisation can deliver high-quality care and emergency response services to a significant proportion of New Zealand's population.

"Omda Readiness is key to helping us achieve our contractual response time targets and getting the best from our resources," explained Dave. "It also facilitates our Patient-Centred Deployment Plans, where we prioritise our stations based on where the next expected call is likely to be. We simulate different scenarios and establish which produces the best response times to ensure that what we are doing is best for patients."

Internally, one of Hato Hone St John's focus areas is ambulance utilisation. As well as guaranteeing the service has enough resources available at any one time to respond to incidents, utilisation targets are critical to maintaining a healthy, happy and motivated workforce.

"When we perform modelling, we use the platform to calculate expected utilisation. We do so because we want to ensure the welfare and safety of our staff and guarantee they receive adequate rest breaks," said Dave. "We have performed a lot of research that shows that, as utilisation increases, you get fewer rest breaks, more sick leave and more staff fatigue. Ultimately, if we look after our staff, they provide better care, and patient satisfaction improves. It is also easier to attract and retain employees."



# Disaster recovery and rebuilding emergency services

Shortly after Hato Hone St John acquired Omda Readiness, the 2011 Christchurch earthquake resulted in large-scale damage to the city and local communities. "After the earthquake, there was a significant focus on how to rebuild. Facilities were destroyed, the nature of the city changed, and patterns of demand altered," noted James.

Dave recounted how much of Hato Hone St John's early work with Omda Readiness concerned the response to the disaster. "With the Christchurch earthquake, there was considerable loss of life and damage to the city and its infrastructure. In the immediate aftermath, with several of our stations destroyed, we used the platform to determine how we could maintain coverage of the city utilising police stations and other alternatives."

Widespread damage to roads and other infrastructure also meant Hato Hone St John utilised the product to adjust response



behaviour to accommodate slower road conditions and closed streets.

In the longer term, Omda Readiness played a critical role when shaping the post-disaster emergency services landscape. "The Christchurch earthquake was a catalyst to change things, reset and rebuild," Dave said. "Within the city, we moved to a new Hub and Spoke model for service delivery. We built the plan using the platform to decide where to place all the spokes to optimise response performance."

After the earthquake, a large number of residents left the city. Though many returned, they did so at different times. Dave described how this presented a unique challenge. "Part of the rationale behind moving to a Hub and Spoke model was to enable us to be more flexible and capable of adapting to new dynamics. Omda Readiness and the new service delivery model enabled us to adjust the spokes and optimise their locations, allowing us to better respond to changing demographics and population shifts."

# Making fundamental changes to the financing process

"When organising ambulance services, there are so many different inputs. You need to factor in changing road speeds, call growth, time spent at the Emergency Department, and so much more. It is complex. Unless you use simulation software, it is very hard to accurately work out what you need."

– Dave Richards

One of the most innovative and unique ways Hato Hone St John utilises Omda Readiness relates to its funding arrangements. Dave talked us through the previous commissioning process: "Historically, our ambulance activity and resource modelling was done with very little input from our funders and had varying success."

In the last funding round, Hato Hone St John and the commissioning body adopted a new approach based on Omda Readiness modelling. Kamal broke down the changes. "Hato Hone St John took the 2018 census information and used the platform to forecast where things would be in 2022, 2023, 2024 and 2025, creating a four-year model. Over those four years, they iteratively added shifts in the model and ran simulations until it produced results that matched Hato Hone St John's performance targets. They then presented the commissioners with these options and the interaction of funding, FTEs, and extra ambulance shifts, amongst other factors."

"The new funding approach has been a game changer," Dave added. "This time, we worked very closely with the commissioners, so they helped determine the assumptions we were operating under and working towards. We modelled several scenarios based on different targets. With these scenarios we could then ask our funders: What do you want us to do? And how would you like to help us achieve it? It has been a lot more effective this time around. We received full funding for one of the scenarios modelled."

James was clear about how this development demonstrates customer and commissioner confidence in the platform's modelling capabilities. "Omda Readiness is being used formally as a scientific reference to award



hundreds of millions of dollars of funding. Both parties have agreed that the platform should be the basis for future funding arrangements."

# Facilitating greater collaboration and improved understanding

As part of the new funding process, Hato Hone St John made a concerted effort to engage the commissioning body in its modelling. "Having the funders on that journey, where they are involved in deciding the inputs, seeing the results coming out of Omda Readiness and making calls, has been much more successful than us just doing it behind the scenes and then handing over a funding request," Dave elaborated.

Omda Readiness is also driving greater engagement and understanding in other areas. "We are currently looking at implementing the Hub and Spoke model in other regions as well," said Dave. "Omda Readiness has been key for determining station locations and showing property and operational teams that we have resources planned for the right places."

"We are asking board members to invest large sums of money in changing how we plan station locations and property in a big city. Now, we take board members through the assumption document and ask the board to agree to the assumptions we will run in the model. We can talk them through the reasons for certain decisions via the simulation and it ensures they understand that we are not just picking random points on a map. People are more accepting of the results, and there is less conflict over them. We can implement and move forward more quickly."

The solution's ability to communicate the complexity of emergency service delivery, help

other parties understand strategic decisionmaking, and create a space for dialogue is extremely valuable. This is demonstrated by the fact that the commissioning body has shown significant interest in Omda Readiness's modelling capabilities and brought its own questions to the table.

"Recently, I have been working on extra questions that the commissioners are interested in," said Kamal. "They want to see how sensitive the results are to changes in some assumptions. What if core growth increased by 1 or 2%? What if the wait time at hospitals increased by 10 or 20 minutes? What if traffic was worse by 20%? The software allows us to run scenarios, model that and provide answers."

# Connecting Omda and customers to create a more powerful product

"Omda Readiness enables customers to show that they are making data-driven decisions and using a systematic, evidence-based means of determining the resources required."

– Kamal Patel

Though Hato Hone St John operates a talented Business Intelligence team with experience using Omda Readiness, they also use Kamal as an Embedded Resource. "Kamal has been instrumental in supporting new analysts and helping to train and upskill them," Dave explained. "His expertise also fills gaps when other experienced users have left or moved on to other roles."

Integration within Hato Hone St John's Business Intelligence team ensures Kamal benefits the organisation in several ways. Kamal described



his role as connecting Omda and Hato Hone St John more closely. "An Embedded Resource ensures the two sides work together. You have people at Hato Hone St John who know everything about their operations and something about the platform. And then the Omda team, who know everything about the platform and something about the customer's operations. With an Embedded Resource, you get someone who can reconcile the two. You get the benefit of both."

Dave agreed that Kamal brings Omda and Hato Hone St John closer. "It is like a business partner model. He is present in the organisation, and you can give him a ring or talk to him in person at any time. He understands the organisation and can relay his insight to Omda. He knows the tool well and can liaise with other Omda experts to find solutions."

Kamal also provides an "outside" perspective on Hato Hone St John's use of the product. "Customers don't always make full use of new features," he noted. "As I'm embedded in the customer's team, we can make quicker and better use of new functionality. Hato Hone St John also has me developing processes and best practices for the organisation, product and simulations. These guarantee greater

reliability and consistency of results and mean Hato Hone St John has a documented onboarding process for new employees."

James summarised by arguing that Embedded Resources mean a deeper insight into customers' needs and a superior product in the long run. "Omda Readiness is a complex, constantly-evolving product. That means you can ask questions and try things we did not necessarily think about when we were designing and building features. Being close to the organisation, we see what problems are coming up, what the product is asked to do and what they wish the platform could do - and that informs future development."

Over the past decade, Hato Hone St John has repeatedly utilised Omda Readiness in innovative and exciting ways.

From reshaping Christchurch emergency service delivery to developing a new funding model centred on the platform, the organisation constantly pushes the boundaries of what is possible with the product. As we continue to build and evolve Omda Readiness to assist Hato Hone St John in overcoming future challenges, we look forward to seeing how it maximises the platform's potential in the coming years.

#### For more information about the case or Omda Readiness, please contact the Omda team:



Kamal Patel Omda Senior Business Analyst kamal.patel@omda.com



James Coe Omda Customer Success Manager james.coe@omda.com