# Rewardle

Sumo Logic helps Smooth Rewardle's Transition to Microservices and DevOps

## Overview

**Company**
- Rewardle

**Industry**
- Technology

**Region**
- Australia

**Size**
- 50+ Employees

**Use Case**
- Continuous Delivery
- Monitor & Troubleshoot

## Business

Rewardle is a marketing and transactional platform that combines membership, points, rewards, mobile ordering and payments along with social media integration into a single, cloud-based platform powered by big data analytics.

## Challenges

Rewardle needed a way to gather insights from its system logs as this fast-growing company increased the number of its cloud servers, and moved to event-driven systems management and a microservices architecture.

## Solution

Rewardle selected Sumo Logic's cloud-native machine data analytics platform, providing Rewardle full-stack visibility and real-time insights into its AWS servers and microservices architecture.

## Results

- Sumo Logic helped Rewardle successfully move from a systems-based view to an events-based perspective.
- The move provided the intelligence Rewardle needed to make sure all of its services run as desired and expected.
- Rewardle has been able to build standardized logging into all deployments, and allow multiple teams to easily deploy new services without loss of data or log management overhead.
- In addition, Rewardle has been able to address cross-system questions where log aggregation enabled the visibility of cause and effect side-by-side.
- Attain instantaneous root cause analysis when issues arose through easy-to-deploy machine data analytics.

> "Sumo Logic has made it easy for us to get a very robust and scalable log analytics system in place without having to put significant effort into actually building and maintaining that ourselves. That's meant that we can keep our developers focused on developing, instead of having to worry about internal infrastructure to build and manage."

Kevin Littlejohn, DevOps Manager, Rewardle

If you take what people love about social media, add what they appreciate most when it comes to membership reward points and then mix in the convenience of mobile ordering and payments, you would have the exceptional digital customer engagement created by Rewardle. This is why it's no surprise that Rewardle is a phenomenal success in Australia, with nearly 2 million members and over 5 thousand participating businesses. Considering the quality of its platform and its steady growth, Rewardle is transforming how customers connect, share, and transact.

Like many businesses today, Rewardle runs its business-technology systems within Amazon Web Services (AWS). And its growth in the past year has meant a considerable corresponding increase in the number of the servers it needs. To keep it all manageable, Rewardle has embraced a move toward a microservices architecture. In the first year of its microservices transition, Rewardle focused on the fundamental services necessary such as authentication, testing, security and other services that support a continuous integration pipeline. "With that foundation now in place, every new project will be deployed as its own separate service," explains Kevin Littlejohn, DevOps manager at Rewardle. This move to microservices meant that it was also critical Rewardle have the organization and tools in place to support DevOps.

Rewardle's microservices support multiple user-dedicated front ends, such as those that face merchants, internal staff, and customers. Most of Rewardle's development today is conducted with .NET on Windows, and increasingly with .NET on Linux in Docker. Additionally, so it can test applications closely against real-world conditions, developers work on dedicated stacks built within AWS, while the Slack messaging app is used to deploy services, perform monitoring, and check performance. "Everything has come together, in just the right way, with our technology, and now as we grow quickly we need to be

able to get as much insight from our logs as possible," says Littlejohn. "That means we have to leverage data analytics as much as we can."

**The search for actionable awareness**

To be able to quickly attain the actionable awareness the company needs from the events driving its services, Littlejohn and his team began to search for a data analytics solution that would best help capture intelligence from their log data, optimize their DevOps efforts, and improve troubleshooting and performance management for their modern applications.

With those goals in mind, Rewardle evaluated a number of the leading data analytics alternatives available. Rewardle even considered building its own log monitoring system. Whatever data analytics option it selected had to be easy to deploy, manage and be as AWS-friendly as was possible.

"We looked at a few different options. In the end we chose Sumo Logic because it was affordable, provided the ability to view logs in a very straightforward and easy way, and enabled us to conduct very sophisticated and comprehensive searches," says Littlejohn.

Sumo Logic is a secure, cloud-native, machine data analytics service that delivers real-time, continuous intelligence across the entire infrastructure and application stack. With Sumo Logic, Rewardle gains a service model that helps it to automatically generate audit-ready compliance reports from both its on-premises and AWS event logs and gain the insight it needs to quickly diagnose and fix system errors and service disruptions. Additionally, Sumo Logic's predictive analytics, powered by machine learning, uncovers unknown security events without relying on rules or predefined schemas to ward off impending threats.

The team was immediately happy with its choice. "The support has been stunningly good. The local Melbourne team for Sumo Logic have been excellent. They've been to our office numerous times and have been extremely helpful providing us pointers and giving us a hand getting the most out of the system. I was very impressed with the tech support we got before and after the sale. It was nice to continue getting good support after you've signed the contract," says Littlejohn.

Today, Sumo Logic provides Rewardle the single source it sought for viewing all of its log data across all of its systems and microservices. "That's one of the things that's helped us as we move to the event-driven system, and it's one of the things that's going to be crucial to us. We have to be able to check aggregate logs across multiple systems for a single event," says Littlejohn.

Today, with Rewardle's event-driven management architecture, for which Sumo Logic's support is central, all events are tagged with an originating event ID. This way, Littlejohn and his team can then track that specific event and find all of the actions that subsequently triggered from that event. "This approach allows us to tie a whole bunch of disparate systems together and get very specific in our analysis," Littlejohn says.

**Standardized and centralized data analytics**

Sumo Logic has also helped Rewardle standardize and centralize where all of its log data resides and to best analyze it. "Anyone who we authorize can easily access this [Sumo Logic's] analysis and get the insight and visibility they need. It's about making sure that developers have access to all the things that will help them to develop better. And Sumo Logic is so easy to use and deploy that we can bake that right into their pipeline. This means when somebody spins up a new service or deploys a new server, they don't have to think about the logging and analysis. It's just there for them," says Littlejohn.

Sumo Logic has also helped streamline instantaneous root cause analysis when issues arose. "Sumo Logic means that we're comfortable that the information we need is going into one place, and can be accessed. This way, when something strange happens, and we discover an ad hoc need for more information, we've actually have that information at hand," says Littlejohn.

A recent example of that level of instant insight provided by Sumo Logic occurred when migrating a large quantity of user data from one system to another, and an unrelated system showed performance issues. Rewardle was able to quickly identify the queries and events involved, demonstrate that they were triggering behavior in the unrelated system, and disable that behavior, because the aggregated logs provided a clear view of the flow of events through multiple systems. The same is true for endpoint issue resolution. "If something happens on a specific tablet, we can identify precisely what tablet is having an issue, and follow the events through multiple systems to find their impact," he says.

In summary, Sumo Logic has proven its value and ability to provide the intelligence Rewardle needed to make sure all of its services run as desired and expected. "Sumo Logic has made it easy for us to get a very robust and scalable log analytics system in place without having to put significant effort into actually building and maintaining that ourselves. That's meant that we can keep our developers focused on developing, instead of having to worry about internal infrastructure to build and manage," says Littlejohn.

Finally, Sumo Logic helped Rewardle successfully move from a systems-based view to an events-based perspective for systems and applications management. "That's really important for us because we are now able to search across lots of different systems based on a particular event, rather than going into each individual system in an attempt to find information," says Littlejohn. "Once you're in a microservices environment, the individual systems are largely irrelevant when something needs to be investigated. What matters is finding the specific event and what things it triggered. Sumo Logic enables us to do exactly that."

## About Sumo Logic

Sumo Logic is a secure, cloud-native, machine data analytics service, delivering real-time, continuous intelligence from structured, semi-structured and unstructured data across the entire application lifecycle and stack. More than 1,000 customers around the globe rely on Sumo Logic for the analytics and insights to build, run and secure their modern applications and cloud infrastructures. Founded in 2010, Sumo Logic is a privately held company based in Redwood City, CA and is backed by Greylock Partners, DFJ, IVP, Sutter Hill Ventures, Accel Partners and Sequoia Capital. For more information, visit www.sumologic.com.