Chime reduces crash rate by monitoring with Bugsnag

challenge
Chime wanted an error monitoring solution that would work with React Native, unify its error management across platforms, and ensure stable experiences for iOS and Android users.

results
Chime benefits from complete clarity during app releases with Bugsnag’s stack traces, filtering, and Stability Center, which enable complete error monitoring and fast debugging to ensure app stability and lower crash rates.

industry
Digital banking

platform
React Native

location
San Francisco, CA

Chime aims to stabilize user experiences and lower crash rates
Founded in 2012, Chime is a technology company that believes banking should be helpful and easy. Chime offers mobile access to banking services provided by its partner banks to provide members with a Spending Account, optional Savings Account, and Chime Visa® Debit Card. Members can also access SpotMe for no overdraft fees and receive their paychecks up to two days early.

Over two years ago, Chime consolidated its Android and iOS mobile app development on the React Native (RN) platform. Chime’s mobile engineers recognized the need for a stability management solution that would work seamlessly with RN and provide more details than the typical error monitoring tool.

“We wanted to track crash rates to make sure we improved the stability of the product over time.”
– Engineering Manager, Chime

Shift to React Native required support from an error monitoring solution
When Chime originally launched its services, the company developed separate Android and iOS mobile apps. Approximately four years later, the decision was made to move to the React Native platform to consolidate engineering efforts and deliver a unified member experience. Hand-in-hand with this decision was the need to find an error monitoring solution that could handle RN apps. Chime did not want to rely solely on the built-in app store tools. Not only would it be more difficult to track crashes and monitor unexpected errors, but some errors are platform-specific. The team wanted a solution that would bring all bugs together in a single monitoring location and provide stack traces.

A mobile engineer recommended that Chime evaluate Bugsnag. As the only error monitoring solution that supports RN, Bugsnag aggregates errors across iOS and Android platforms and provides the level of detail that the mobile engineers wanted.
Today, Bugsnag is used across product teams within Chime. “With React Native, the same developers are working on both platforms. If we used only the built-in tools with the Play Store or Apple Store, it would be more difficult to track the crashes,” an engineering manager explains. “With Bugsnag, we have one very useful tool where we can see both sides.”

**Bugsnag enables release stability and control over all error types**

Bugsnag is used by Chime for monitoring release rollouts and for debugging. As each new release goes out, mobile engineers use filters to find any spikes in errors, determine what they are, how many events have happened, and how many users are impacted.

Bugsnag supports error data on Android’s ANR (Application Not Responding), Chime includes them in its crash rates. “Anything that detracts from the customer experience is really important to us. That’s why we think of crashes and ANRs similarly and include ANRs in our crash rate,” explains an engineering manager.

“Beyond monitoring crashes, we’re able to monitor when unexpected errors come through and handle those gracefully,” a software engineer states. “It gives us deeper control over what’s erroring out in the app and provides stack trace along those lines as well.”

The team uses stack traces to view the line of code where the app crashed, breadcrumbs as a secondary method to narrow down unhandled crashes, and custom data in the Bugsnag error reports to group errors and debug.

**Chime decreases crash rate and saves debugging time with Bugsnag**

Since using Bugsnag, Chime has exceeded its software stability goals. Engineers are able to maintain a healthy application stability score and spend less time investigating and fixing bugs. “It’s a helpful tool,” says a Chime software engineer, recognizing Bugsnag as playing a role in that accomplishment. “Bugsnag accelerates the debugging process,” adds an engineering Manager.

Adding custom metadata in Bugsnag has been particularly useful to Chime as it provides more context behind crashes. Chime is focused on developing a deep understanding of what its members are encountering in the app and providing the best experience possible. Chime also benefits from Bugsnag integrations with Jira and Slack for seamless ticketing, communication, and monitoring of its app store ratings.

“It’s a great tool for delivering a better customer experience, making the app more stable, and taking pride in your application as an engineer.”

– Software Manager, Chime