



CLIENT

Shutterfly Inc.

INDUSTRY

Digital Consumer Goods

SERVICES

DevOps
Cloud Infrastructure
Database Management

TECHNOLOGIES

Amazon Web Services (AWS)
MySQL
Amazon RDS
Chef

BUSINESS NEED

Scalable, cloud-based MySQL database and ongoing, post-migration support.

SOLUTION

Built, tested, and migrated a sharded MySQL cloud-based environment for operational visibility, backup and recovery, scalability, and fault tolerance to minimize outages and maximize profitability. Continues to provide post-migration support.

RESULT

No downtime during launch; successfully supported traffic spikes. Significant increase in application stability and flexibility. Scalability for marketing bursts and web-scale growth.

PYTHIAN HELPS SHUTTERFLY ROLL OUT A SCALABLE DATABASE IN THE CLOUD

Based in Redwood City, CA, Shutterfly Inc. is an internet-based publishing service that allows users to store, share, and enjoy billions of photos, turning them into award-winning picture books, meaningful cards, imaginative gifts, home decor, personal websites, and much more.

In 2013, Shutterfly acquired ThisLife, a cloud-based application used for intuitive photo and video organization, storing, and sharing. Together, ThisLife and Shutterfly provide a unified, end-to-end solution that allows customers to intelligently organize, store, share, and create physical and digital products across web and mobile devices.

BUSINESS CHALLENGE

The acquisition of ThisLife brought new challenges in terms of developing a scalable, cloud-based database backend.

Shutterfly engineers had already designed a scalable and flexible architecture for the new application and had chosen a sharded MySQL database due to its availability features and ability to cost-effectively scale horizontally. What they needed now was expertise in cloud database replication, sharding, monitoring, and tooling.

Finding a provider that could scale the backend affordably and without causing any disruption to existing customer activity or business operations became the top priority in layering ThisLife's technology onto Shutterfly's platform. With only three months until the scheduled launch of the newly integrated product, time was of the essence.



SOLUTION

Shutterfly thoroughly examined using a number of off-the-shelf options; however, they ultimately chose to enlist the expert help of Blackbird.io (now Pythian). In addition to having the opportunity to learn from experienced cloud infrastructure developers, working with consultants meant that Shutterfly could customize their sharding algorithm to better align with the unique demands of their business model and ultimately improve the overall flexibility of their application.

Pythian offered deep MySQL and distributed systems experience, along with a DevOps team that provided expertise in configuration management, orchestration, and operational visibility, which was critical to helping Shutterfly integrate with ThisLife and deploy the new application on time.

Together, Shutterfly and Pythian designed a modified, sharded MySQL environment with a focus on operational visibility, backup and recovery, scalability, and fault tolerance; all of which were important to minimizing outages and maximizing profitability when the application was up and running. After being built and tested, Pythian helped perform the migration and provided post-migration support. Throughout the process, Pythian's technical service delivery and project management teams oversaw the launch, tracked and closed any gaps, and ensured constant communication between all necessary parties.

“ Pythian DevOps and Managed Services was a good investment because we got the environment we needed, when we needed it. In the context of the project, it was a high-value solution that fit our budget.”

— Charles Howard, DBA manager of Internet Operations at Shutterfly



RESULT

At launch, Shutterfly's new databases successfully supported the spike in traffic without any downtime. All systems, applications, and servers ran smoothly throughout the various email campaigns they launched over the following six months, while Pythian's 24x7 support services provided constant support and monitoring.

Today, ThisLife uses a combination of legacy Relational Database Services and sharded MySQL databases running on Amazon® Web Services (AWS). With this new, fully scalable, and robust infrastructure, they've had consistent availability and no performance issues.

Their sharded MySQL database allows them to make changes to the application and intelligently spreads data loads across multiple systems. With multiple clusters running, Shutterfly knows that if one cluster fails, the others won't be affected.

“ We have more confidence, stability, and flexibility as we continue to grow and we hope to continue to rely on Pythian's support team to augment our own systems monitoring and troubleshooting, which are crucial to our business”

— Charles Howard, DBA manager of Internet Operations at Shutterfly

ABOUT PYTHIAN

Pythian is a global leader in data consulting and managed services. Since 1997, we have specialized in planning, deploying, and managing business-critical data systems for large and mid-market enterprises. Learn more about Pythian and its elite teams of data experts at www.pythian.com.

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