We must always be ready to transform and align in this fast-moving market. Flexibility and rapidly being able to make changes are essential to our success. The partnership with Hitachi Data Systems enables us to focus on the customer, keep our data center footprint to a minimum, and move to big stair-step capital expenditure purchases. These are extremely important priorities for us.

Tom Munro, CEO
Photobucket

Photobucket Pictures Better Business Efficiencies With Streamlined Cost Model and Hitachi Cloud Services

This trending online photo printing and sharing company shifted from 20PB of data center hosting infrastructure to a single-vendor, all-cloud solution with Hitachi Cloud Services. Rather than recurrent storage capital outlay, Photobucket now focuses on an optimized consumption model for greater business agility and innovation.

Photobucket is a champion of preserving memories. The company website aptly ushers everyone from tech-savvy millennials to octogenarian grandmothers through the online process of how to load, edit, browse, print and share photos.

Founded in 2003, Photobucket is headquartered in Denver, Colorado, and has another office in San Francisco, California. Photobucket is the global leader in online photo hosting, sharing and printing services, with over 100 million members and 60 million unique global visitors per month. Users upload many millions of images and videos daily and can easily and quickly send memories across social networks, email and mobile devices.

The company is always looking for ways to improve its services and continue delighting its members. The Photobucket Print Shop allows users to create one-of-a-kind photo treasures, from blankets, canvas prints, photo books and calendars to device cases and shower curtains. And, of course, Photobucket has a mobile app for anytime, anywhere storing, editing, GIF making and sharing.

Photobucket was recently honored with the Gold Award from Top Ten REVIEWS, an independent online expert product reviews company. The Gold Award goes to the top-ranked and weight-scored company in its particular product or service category, based on performance, features, ease of use and overall attributes.

“Excellence is something we are passionate about, and our value proposition at Photobucket is simple. We allow you to bring all your photos and videos together in one place. From there, you can do all the things you imagine,” says Tom Munro, chief executive officer at Photobucket.

Photobucket

INDUSTRY
Retail: Online Photo Printing and Sharing

SOLUTION
Cloud, File and Content

HARDWARE
Hitachi Content Platform

SERVICES
Hitachi Cloud Services provided by Hitachi Data Systems

Benefits at a Glance
- Single-vendor strategy.
- Fully managed cloud service.
- Improved business agility.
- Extensive cloud mobility and application integration.
- Cost-effective consumption model.
- Data protection.
The Challenges: Storage Management, Capacity and Security

With popularity and size comes the undisputed responsibility of managing stored data. While Photobucket is a cloud service provider for its members, the organization has been using network-attached storage (NAS) in its own colocation spaces to house data. Handling billions of file transactions every day plus in-house business operations, Photobucket has grown its data storage to approximately 20PB across three main data centers. The storage costs for this hosting company were substantial.

“We wanted to change our business model from a capital outlay basis to operational expenditure. The goal for data storage was to shift to a cost-effective consumption model with object-based interfaces, either on-premises or in the cloud. We saw this as an opportunity to move away from having to forecast and make significant incremental capacity purchases every quarter. That’s always challenging because we’re either going to buy less than we need and have to buy again to meet project deadlines or we buy too much and I’m spending capital too early. Finding that middle ground is really, really hard when you’re planning capital purchases, so we wanted to offset that by right-sizing how we managed storage moving forward,” explains Michael Clark, chief technology officer at Photobucket.

Existing NAS systems provided great file access; however, Photobucket wanted to securely store original-size photos offsite plus keep Web-sized images in house for retrieval by customers. “We had legacy architecture, built around dependencies on legacy storage, built upon connections to NFS, built upon certain types of layouts and file structures. This architecture hampered the business from making certain decisions about technology purchases and also what we could do from a product innovation perspective. We needed to transition to a solution that allows us to flexibly move, grow and report on data without affecting the customer in any way,” Clark furthers.

These challenges led Photobucket to kick off a search for cloud storage providers. The goal was to find a partner capable of managing necessary infrastructure so Photobucket did not have to build a new parallel infrastructure in house. Additionally, Clark wanted the solution to be simple to integrate and support the anticipated data volume without further burdening or adding Photobucket staff.

“Dependability, resilience, credibility and cost were all essential factors for us to consider with any new solution. And we needed to find the best home for the 15 billion images that are people’s personal photos. From keepsake baby photos or pictures of cars that they sold to the ubiquitous selfies, our members’ photos and videos are precious to them so they’re precious to us,” he adds.

The Solution
Photobucket Zooms in on the Right IT Business Model

Photobucket was intent on finding the best solution as soon as possible. The CTO contacted Trace3, a decade-plus solution provider with whom Photobucket has had a long-standing relationship.

Next, Photobucket IT contacted Hitachi Data Systems regarding its cloud capabilities, and asked the Hitachi team to work with Trace3 to develop a solution. Simultaneously, 30 other companies were bidding with consumption-based solutions of their own. Among the contenders were Amazon Simple Storage Solution (S3), NetApp, EMC with multiple vendors and providers, and Data Direct Networks WOS.

After thoroughly exploring all potential solutions, the Trace3 and Hitachi team submitted the winning proposal for an all-cloud solution. It was a single-vendor strategy using Hitachi Cloud Services, with Hitachi Content Platform (HCP) as the primary technology. Trace3 and Hitachi were able to immediately provide an effective proof of concept to Photobucket, showing viability and cost efficiencies over less mature models.

“Of all the competition, Hitachi offered the most compelling proposal,” Clark says. “We needed to find a cloud service solution that would support our substantial growth plans for 2015 and beyond. The strong partner relationship HDS provides and the financial structure made the most sense for this critical part of our business. We know HDS will provide reliable cloud services and solution simplicity for our complex infrastructure needs.”

Enterprise Cloud With Hitachi Cloud Services

Hitachi Cloud Services with Hitachi Content Platform forms the enterprise cloud foundation for Photobucket’s photo-hosting application. The Hitachi solution provides Photobucket with cloud

“Now we have a clean, modern solution with Hitachi Cloud Services, which gives us access to new levels of support and confidence. We’ve been able to introduce a whole new storage solution without having to introduce a whole new storage team or new responsibilities across our operations team. The business value continues as our team gains more time to innovate, with existing solutions, inside operations and in software development.”

Michael Clark, CTO
Photobucket
object storage services, and a flexible, open, pay-as-you-grow consumption model with predictable costs and no oversubscription of storage. The organization can finally transition from infrastructure responsibilities to focusing on revenue-generating core application business.

**Cloud Mobility and Archive**

Hitachi Cloud Services is a managed subscription service that allows Photobucket to pay month to month through a purely operational model. Hitachi Cloud Services is entirely owned and managed by Hitachi Data Systems. The services are of enterprise quality and allow application integration and off-site content archival of storage data assets. Integration with on-site assets is seamless and workflows automate storage tiering into the cloud for short- and longer-term retention. Hitachi Cloud Services protects, leverages and cost-optimizes investments.

Hitachi Content Platform is an enterprise-class object storage solution capable of supporting extensive cloud mobility and archive goals. With massive scale of performance and capacity, HCP allows users to store, share, synchronize, protect, preserve, analyze and retrieve file data in a single system.

Chock-full of all the necessary features for managing a cloud-based enterprise, HCP enables automated data movement to the cloud, based on policy, with metadata securely stored on site. An intelligent suite of easy-to-use management and data protection tools allows Photobucket to retain control and visibility of daily IT operations at all times, within the firewall, to the cloud and beyond. HCP employs high-density storage, reliable multi-tenancy, and open REST interfaces, including Amazon S3, and OpenStack Swift.

Photobucket implemented the Hitachi solution as a replicated, dual-copy deployment. This allows Photobucket to fully integrate its patented application with HCP and store two copies of original media: a copy in the Phoenix data center and a copy in the New Jersey data center. The strategy includes fully ingesting historical images over time, followed by 1.8PB year-over-year data growth.

**The Benefits: Increase the Aperture for a Brighter Future**

In photography, aperture is how light enters a camera to add dimension or magically bring everything into focus. For Photobucket, the light is shining brightly on the new solution for managing the company’s ever-growing data.

Collaborative efforts by Trace3 and Hitachi Data Systems helped Photobucket evolve its data storage infrastructure to an all-cloud solution for better cost economics and greater business flexibility. “We must always be ready to transform and align in this fast-moving market. Flexibility and rapidly being able to make changes are essential to our success. The partnership with Hitachi Data Systems enables us to focus on the customer, keep our data center footprint to a minimum, and move to an operational expenditure-based cost model. These are extremely important priorities for us,” notes CEO Munro.

**Big-Picture Cost Economics**

Photobucket credits the Hitachi solution with chiseling away at rampant storage costs, lowering operating expenditures while replicating two copies for each original image. “Access fees are pretty common in most cloud architectures, but the Hitachi product was built to allow us to scale up and down as we need, and to pull in or push out massive amounts of data, in either direction, without hitting those access fees. We’re reading or accessing files millions of times a day, so it’s pretty important for us as we transform the business from both a cost perspective and in how we are building the products we need,” says Clark.

**Business Value and Innovation**

Examining improvements since deploying Hitachi Cloud Services and HCP, the CTO sees opportunities beyond the cost economics. “Now we have a clean, modern solution with Hitachi Cloud Services, which gives us access to new levels of support and confidence. We’ve been able to introduce a whole new storage solution without having to introduce a whole new team member or a whole new responsibility to our team. The business value continues as our team gains more time to innovate, with existing solutions, inside operations and in software development,” Clark finishes.