Situation
Photographer Gavin Wade was dissatisfied with digital image delivery systems in 2014, so he set out to create a better platform for photographers worldwide—CloudSpot. Rapid growth led storage costs to snowball under legacy provider Amazon S3, to the point Wade's team found itself scaling back services and changing workflows to help offset AWS expenses.

Solution
Wade felt his data, and company, were captive to Amazon S3. Yet the possibilities unlocked with Backblaze B2 Cloud Storage—including reducing broader operating costs 50% and data transfer costs 90%—were eventually too great to pass up, especially after learning of Backblaze's secure data migration solutions. CloudSpot proceeded to move its 700 TB (120+ million files) to Backblaze in six days with no service disruption.

Result
With the savings realized by switching to Backblaze B2, CloudSpot is pursuing strategic expansion. For example, they reintroduced a free photo migration service previously abandoned due to high AWS costs—immediately igniting customer acquisition and recurring revenue. And they funded incremental engineering headcount. With better infrastructure, financials, and more, the SaaS business is poised for years of exponential growth.

“Now, we have a system for scaling infinitely. It lowers our breakeven customer volume while increasing our margins, so we can reinvest back into the business. My investors are happy. I’m happy. It feels incredible.”

Gavin Wade, Founder & CEO, CloudSpot
“How would you do things differently?” Every important decision in Gavin Wade’s life started with that question. Dreaming big in his early 20s, he and his wife returned from their honeymoon to quit their jobs and pursue wedding photography after asking themselves just that. Four years later, when delivering images to their customers became a bottleneck with no premium solution that suited him, Wade asked himself that question again.

This time, Wade’s answer led him to jump from photography to SaaS product development to create the solution he needed himself. “The digital delivery systems at the time were just ugly,” Wade complained. “It didn’t feel right to charge thousands of dollars to shoot a wedding, then say, ‘Here’s your Dropbox link. Have a nice life!’” So, he spent hours burning images onto CDs or USB drives, wishing for a tool that offered an easy, beautiful image delivery experience for clients and other wedding vendors.

He put together some wireframes and functional requirements and sought out the developer talent he needed to get his new B2B2C venture off the ground. In 2014, CloudSpot was born. “We had the blessing of being in a startup incubator in the earlier days,” Wade said. “We brought in some pre-seed, angel investment that really helped us scale.”
Amazon S3: A Marriage of Convenience

“In any startup environment, there are fires all over the place,” Wade explained. “You touch the door handle. If it’s not too hot, you let it burn, and you go take care of the door that has smoke pouring out. That was our approach to product development.”

To get the business up and running, he used Amazon Web Services for storage and backup. It was the go-to for most startups at the time. As Wade scaled his business, other fires took priority. Then, around 2018, the storage handle started getting red hot.

Again, Wade asked himself, “How can we do things differently?” Unfortunately, this time, he didn’t like the answer. He acknowledged, “We had a few internal conversations where we concluded that we were stuck with Amazon. That’s never a good feeling in business.” Feeling shackled to Amazon, Wade and his team looked for other places to affect changes and cut costs.

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Making Amazon S3 Work, for Better or for Worse

The CloudSpot team focused on reconfiguring their monolithic system into a cluster of microservices to enable more independence and flexibility. Previously, when a customer uploaded an image, it had to pass through a series of checkpoints—for example, metadata extraction and image analysis—before landing in Amazon S3. Wade noted, “If one thing went down, the whole thing would come tumbling down.”

They moved to a Kubernetes cluster environment where images uploaded directly to Amazon S3, then CloudSpot’s microservices retroactively queried the data they needed from there. “We were really intentional about creating an environment where our microservices survive on their own. That led us to be much more scalable in terms of infrastructure,” he explained.
CloudSpot Says “I Do” to Better Storage

A year later, even after workflow optimizations, CloudSpot’s storage costs continued to skyrocket as their customers uploaded close to one million images every week. They also felt they were being constantly nicked and dimed. After a busy fall 2019 season, they took stock. “We saw five times more upload volume than we had the previous year, and we wanted to position ourselves for more triple-digit growth in the year ahead. As we worked out our forecast models for the year, that’s when it really hit me,” Wade said.

Wade had found Backblaze when the storage door handle first started to heat up, but the prospect of moving seemed insurmountable. Now, motivated by his growth and OpEx forecasts, he reached out to understand the true costs and logistics of switching storage providers. When he crunched the numbers with the Backblaze team, the potential ROI of moving his data from Amazon S3 to Backblaze B2 was too substantial to ignore. He confirmed, “It would cut our storage costs dramatically, and we would slow the rate at which they compound as we continue to grow. For our business model, it was just huge.”

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Gavin Wade, Founder & CEO, CloudSpot

Sealing the Deal for 120+ Million Files

The only barrier was the process of moving CloudSpot’s data from one public cloud to another—a scary proposition when files are a business’ livelihood and time is a precious resource. Backblaze partner Flexify.IO helped make this a non-issue—it uses cloud internet connections rather than clients’ local internet bandwidth to facilitate fast, reliable migrations.

CloudSpot moved roughly 700 TB in six days. During this time, customers were still uploading images to its Amazon S3 buckets. This was necessary because CloudSpot’s data is accessed so frequently (one of their galleries is accessed every one or two seconds) that they had to be able to support both environments to make sure everything was working. After a week of testing, they directed new uploads to Backblaze B2, moved the interim uploads to Backblaze B2 within one day, and essentially stopped ingress into Amazon S3.

“It was like changing the tires on a car while it’s flying down the road at 100 mph,” Wade remarked. “The folks at Backblaze really helped walk us through that. We were the bottleneck in terms of diverting our new uploads to Backblaze B2. Once that was done, it was a piece of cake. Backblaze’s support was by far and away the best. Especially for someone who’s not technical, it’s really important to see the faces of the people who are going to be carrying your baby from one room to the next.”

With more than 120 million files now residing in Backblaze B2, CloudSpot’s other microservices simply turn their gaze to a new location for stored data. Of critical importance to Wade, the change resulted in no loss of operational efficiency, speed, or reliability. “Everything functions seamlessly, and no customer or end user knows anything is happening differently. The only difference is we’re saving $10,000 to $12,000 a month, immediately, and will save even more as we grow more.”

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Gavin Wade, Founder & CEO, CloudSpot
A Match Made in Storage Heaven

For its role unlocking next-level growth, Wade says moving his data to Backblaze B2 was the company’s biggest initiative of the year and the final step towards optimizing his operations. “Now, we have a system for scaling infinitely,” he said. “It lowers our breakeven customer volume while increasing our margins, so we can reinvest back into the business. My investors are happy. I'm happy. It feels incredible.”

The savings allowed CloudSpot to reintroduce a valuable service. In previous years, they had offered free migration to photographers looking to switch to them. “We’re comparatively the smallest dog in our pound, so we’re trying to be competitive,” Wade explained. “People want to move, but they feel stuck with their current provider just like we did.”

Yet with Amazon's data transfer fees, that offer became cost-prohibitive, so CloudSpot shelved it. This never sat well with Cloudspot, especially when their internal research found 90% of CloudSpot customers saying they wouldn’t have moved to the platform without the free migration. So within weeks of switching to Backblaze B2, CloudSpot restored the service.

“At 1/10th the data transfer cost out, we've been able to add it back with confidence it's a growth leader, not a loss leader, for us,” Wade professed.

The reintroduction ushered in a significant increase in customer acquisition, with beautiful recurring revenue expected to follow ongoing.

Growing the Family

Reinvesting the savings CloudSpot realized from reducing OpEx also means hiring more talented people to support more future growth. “Especially now that a lot of people are out of work, I love being able to hire another developer. We can put that money back into the pockets of hardworking people who can help our product advance, where it would just go into Amazon's pocket before,” Wade said.

Now years into being a startup CEO, Wade also sees how improving CloudSpot’s margins and other financial metrics demonstrates savvy decision-making and strong fundamentals to future investors including VCs who might help amplify the company's growth.

“Software margins are expected to be high. If you can take a big cut of that… It just makes our story so much better, especially as a SaaS business looking to scale, grow, and raise capital.”

Gavin Wade, Founder & CEO, CloudSpot
Backblaze B2 Cloud Storage is purpose-built for ease, instant access to files and data, and infinite scalability. It seamlessly supports workflows via hundreds of third-party software integrations, or through direct APIs and CLIs. At only $5/TB of object storage per month (a fraction of the cost of the largest solutions), Backblaze B2 is priced so users don't have to choose between what matters and what doesn't when it comes to backup, archive, data organization, workflow streamlining, and more.

Flexify.IO is a cloud storage virtualization and migration platform that helps businesses build cloud-agnostic solutions by simplifying migration and avoiding dependency on a single cloud storage provider.