

The Cloud Chronicles: Unbiased straight talk from real cloud customers.

There is no shortage of opinion out there regarding the value of one cloud provider over another. We want to provide our 1,500+ cloud customers with a platform to share their story, unfiltered and unabridged, so that others may benefit from what they have learned along the way.

Part Two: A Tale of Two Clouds

An interview with Sergei Leshchinsky, the Senior Director of Information Services at Polar Inc.





Interviewer

Scott Thomson

Director, Business Development
Public Cloud
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Guest

Sergei Leshchinsky

Sr. Director of Information Services
Polar

“The cloud journey is not always a pleasant or complete success at first.”

Good morning Sergei, and welcome to our Cloud Chronicles. Over the next 15 minutes or so, we would like to get to know you and your company. We want to understand the problem or opportunity that you have set out to solve for your customers, how technology has played a role, and dig into some of the critical technology decisions you have made and learned from along the way. We intend to share this interview, unfiltered and unbridged so that others (our 1500+ existing cloud customers or others) may benefit from what you have learned along the way. So with that, let’s get started!

Sergei, would you please tell us more about yourself?

Absolutely, I’m currently the Senior Director of Information Services at Polar, and my primary background is in network operations and infrastructure. I’ve been with Polar for nearly ten years.

Polar is a Format Management Platform (FMP) that is used by publishers, agencies, and brands to create, execute and optimize a variety of digital advertising products including native, social, video, and stories formats. We partner with businesses all over the globe, which means we rely heavily on geo-distributed infrastructure, which is one of the benefits of working with public cloud vendors.

From my understanding, Polar has been in business for about 12 years, so really before the cloud era. I am interested in how much of your business in the context of SaaS platforms you are still maintaining within a more traditional or on-premises infrastructure.

Correct, we started well before public cloud became popular and will still have most of our workloads running on a colocation data center in Toronto. About six years ago, we started actively transferring some of our workloads to public cloud. And as you’ve mentioned before, the cloud journey is not always a pleasant or complete success at first.

We had a pretty poor experience with our first cloud project, and we were using a vendor that was seen as the main player in the cloud space at the time. The project was a total disaster, even after investing time and money, we ended up just canceling the entire project.

“Distributed geographics became an essential part of the Polar Platform, which is a distinct advantage of public cloud.”

I presume your priority around migrating to the cloud was infrastructure as a service and moving virtual machines (VMs) to the cloud. But what I'm curious about is, what were first workloads that you were looking to take to the cloud? Then go into more detail of why the project was in your words a disaster, and what was the key learning from it was?

Well, first of all, we've been running a private cloud based on VMware products, including vSphere and the suite they offer around it for quite some time before we decided to extend production workloads into a public cloud. The vendor we chose was promising a seamless integration with our existing VMware infrastructure, which was the key point of their offering. Their offer was also really on par with our budget, priced aggressively as they had to compete with AWS and Azure, which were already well known and common at the time. It looked like a very appealing offer, and we decided to give it a try for implementing disaster recovery and a business continuity solution.

We were also looking to potentially have a hybrid infrastructure where we could seamlessly transfer virtual machines to and from the cloud. As you may know, it's easy to get to the cloud, but the reverse or “from the cloud” is always a challenge. We hit many roadblocks with implementation, and I think it was primarily because the product was immature at that time. The platform was fundamentally not stable, and it was still obviously under development. So, after all the time and the money we invested for 18 months, we decided to give up altogether.

You've had a lot of learnings, and I imagine that also probably left, correct me if I'm wrong, a little bit of a different taste in your mouth as it relates to public cloud. Today, you are in a much different place with public cloud, so what have been the key technology drivers for you or business drivers to reconsider cloud and go about it differently?

Yes, our approach and need for public cloud today are very different than what we were trying to use it for in the past, which was business continuity, hybrid IT, and disaster recovery.

Over the past couple of years, the variety of services Polar was building up, and new offerings were growing exponentially. We were also expanding geographically as we started actively working with the European and Australian markets. Therefore, geo-locations became an essential part of the Polar platform offering, which is a distinct advantage of public cloud vendors.

It makes sense that you would want to leverage a distributed network with public cloud. Can you explain the benefits it provided to Polar and your customers? Describe, for example, how easy it became to access data and how this provided better user experience with less latency.

One of the key components of our digital advertising business is Real-Time Bidding (RTB: an auction setting where ad impressions are sold and bought, and transactions take

“We were saving around 50% on the egress traffic on Google Cloud.”

place in a blink of an eye. Once an advertiser’s bid wins the auction, their digital ad is instantaneously shown on the website or property of the publisher). We’re talking about a very low latency because the bidding is happening in real-time. The whole process completes within 50ms while the page is still loading in the user’s browser. This further articulates the importance of the geographical presence to minimize every possible delay on the platform side.

I think one of the things that we’re trying to uncover with these discussions is what was the logic behind the technology choices you made at this point? I understand you are now leveraging Google Cloud, but I want to know why Google Cloud was the most appealing to your business needs. Especially with your experience with other vendors in the past.

We started our second cloud migration with AWS, which, in my opinion, offers the most extensive variety and versatile solutions. So, our successful public cloud journey started with AWS, which we still use to this day. Today, however, our public cloud strategy is truly multicloud as we are also operating in Google Cloud. As I mentioned, we heavily rely on geo-distribution and content distribution network providers (A content distribution network [CDN] is a geographically distributed network of proxy servers and their data centers).

About 18 months ago, we consolidated multiple CDN providers we were working with to a single provider, called Cloudflare. Cloudflare offers a solution called CDN Bandwidth Alliance, which automatically carries traffic from the user’s location to the Cloudflare data center nearest your cloud provider, automatically cutting egress fees.

While examining our spending on public cloud, which was primarily AWS, we realized that about half of the budget was explicitly spent on egress traffic. And this is when the CDN Bandwidth Alliance, with a 50% discount on the egress traffic on Google Cloud, started making a difference. That was our initial deciding factor for transferring workloads with heavy traffic exchange, like our real-time bidding service, from AWS to Google Cloud with Cloudflare.

Great to hear you immediately benefited with substantial cost savings from moving to Google Cloud for certain workloads like egress traffic. Have you benefited from other Google offerings like their unique approach to networking?

From what I’ve learned about Google Cloud, they are fundamentally different in many areas and not just their networking implementation. So, the short answer to your question is, we don’t really use a global load balancer because we use our own Cloudflare CDN. Today we use Google Cloud for compute, load balancing, and MySQL.

We keep most of our data storage in AWS because it doesn’t make much sense to transfer that. But we are actively transferring compute workloads and traffic-heavy workloads to Google Cloud and are about 70 percent of the way there.

“We are familiar with both AWS and Google Cloud and believe it is beneficial to be cloud agnostic.”

Is the intent to keep some workloads like data storage permanently on AWS or to move everything over to Google Cloud eventually?

We are fairly happy with AWS, specifically using their file storage services, and it doesn't make sense for us to invest in developer hours to implement this part of our platform into Google Cloud. We are familiar with both AWS and Google Cloud and believe it is beneficial to be cloud agnostic. However, new products or price adjustments may affect or sway our decisions to shift more towards one or another cloud or even abandon one of them entirely.

Invariably, you gain technology leverage by having experience within both clouds and avoiding vendor lock-in. Which we're hearing from our customers and as well as the notion of choice and flexibility as a key benefit that businesses are striving towards. My last question would be, have you started seeing any challenges as it relates to a multi-cloud environment?

Complexity wise - not yet, but I think it's primarily because our footprint is still reasonably small. We're not a big company. Even though we're dealing with a significant amount of traffic, serving hundreds of millions ads per month, our cloud-spent budget remains modest. Because of this, we have minimal leverage when it comes to certain issues working with public cloud vendors. This relates to your question of how can Softchoice help us to benefit further when dealing with public cloud vendors? Acting as a liaison between the public cloud vendors, Softchoice helps us to escalate urgent or critical issues with vendor support to make our migration journey and us more successful.