

Polyvore: Leader of the Fashion Tech Industry

By: Ashley Ruen

Technology has begun to take the fashion industry by storm: from digital closets to online fashion blogs to social shopping platforms like Polyvore. Polyvore is the web's leading fashion community where users have the ability to discover their style and set trends around the world. The site launched in 2007 and became a profitable company in 2011. Now, with over 20 million unique visitors every month, Polyvore has a phenomenal engineering team to keep up with the heavy traffic.

Polyvore's architecture has evolved with the company and they maintain that they will continue to grow and change to stay relevant. Originally the site used traditional LAMP architecture; everything directly accessed a bank of MySQL servers. But with the increased traffic they needed a faster way to maintain their website. They began using the worker queue system to break up massive jobs into smaller chunks. They use a generic framework; Gearman. It uses Perl extensively and has a perl client and APIs. Polyvore uses RabbitMQ for its message broker software. RabbitMQ implements the AMQP standard. AMQP is written in Erlang and is built on the Open Telecom Platform framework.

Operating System: Polyvore runs its service off of the Nginx operating system. Nginx is a free, open-source, high-performance HTTP server and reverse proxy and is known for its high performance, stability, rich feature set, simple configuration, and low resource consumption.

Web Server: Polyvore uses AWS (Amazon Web Services) to run its service off of their cloud-computing platform, offered over the Internet by Amazon.com.

Data Storage: Polyvore uses MySQL to store data. Memcached as a memory caching system to speed up Polyvore's dynamic database-driven website by caching data and objects in RAM to reduce the number of times and external data source must be read. Polyvore uses Splunk to capture, index, and correlate real-time data in a searchable repository that can then generate graphs, reports, alerts, dashboards and visualizations. It also Solr for its powerful full-text search hit highlighting, faceted search, dynamic clustering, database integration, and rich document handling. (open source enterprise search platform from the apache lucene project)

Polyvore's engineering team solves interesting problems that span cutting-edge JavaScript, iOS, data mining, search, ranking, optimization, graphics and scalability on a weekly basis. At a time when the Digital Revolution is affecting every aspect of the fashion industry, Polyvore is using cutting-edge technology to keep the fashion industry relevant in a technology based world.