The New SGI Platform
Tagged is a social discovery website with 300 million members. Its service makes it easy to meet and socialize with new people through games, shared interests, friend suggestions and virtual gifts. Tagged’s vision is to allow anyone to instantly connect with interesting new people anytime, anywhere.

Founded in 2004 and profitable since 2008, Tagged is a market leader in social discovery. Available in 220 countries, Tagged counts 100 million new social connections every month. Tagged is based in San Francisco.

Challenges
The main challenge Tagged most recently faced was choosing the most efficient and cost effective CPU model to replace its older machines. Tagged builds powerful products that enable anyone to meet and socialize through advanced browsing and matching features, shared interests and more. As a social discovery company with over 300 million members, great functionality and ease of use are paramount. In order to best serve such a wide user-base and provide the most accurate match recommendations possible, Tagged processes large volumes of data. So it’s crucial that all of Tagged’s technology functions efficiently — especially when it comes to hardware.

With a multitude of servers, power consumption can become a hefty expense. Newer processor models generally have better performance/power ratios than older models, so it makes sense to replace aging, inefficient servers with newer, efficient ones. However, selecting which particular CPU model to buy can be a challenge, considering the large variety of CPUs available.

A simple approach is to buy CPUs that have the lowest power/performance ratio, so the CPUs will use less power in order to do the necessary work. This often makes sense when only a single server is required, but for a large tier, power efficient CPUs can end up wasting power. This is because most power efficient CPUs are slower models, so more of them are required in order to handle an equivalent processing load. Another factor to consider is price. There’s no point in buying extremely expensive CPUs in order to get minimal efficiency gains. Faster CPUs, which often come out ahead in overall efficiency are nearly always more expensive than slower models. Fortunately, faster CPUs mean fewer servers are necessary, which in turn means fewer hard drives, less RAM, etc.

SGI Solution
Tagged chose SGI’s power-efficient and extremely cost effective Intel® Xeon® Processor E5-2670 servers to replace its aging and inefficient servers and achieve an agile and efficient data center. Intel Xeon Processor E5-2670 servers deliver the best combination of performance, energy efficiency, integrated workload optimizations, and cost-effectiveness. Virtualization and security features work together to deliver a more trusted compute environment. With the Intel Xeon Processor E5-2670, Tagged can harness big data and deliver new services with deeper insights, and eliminate data bottlenecks.
Today, Tagged has a total of 1,167 operational servers that are powered by SGI and represent 70 percent of Tagged's total IT infrastructure. In addition to recently adding new Intel Xeon Processor E5-2670 servers, Tagged also added SGI's Rackable servers.

Not only are SGI's hardware prices highly competitive, its support is better than what competitors offer. When hardware dies, SGI immediately replaces the failing part. SGI also doesn’t have strict compatibility requirements, such as requiring SSDs from the same vendor, etc. On the purchasing side, SGI offers the advantage in configuring the hardware and BIOS to meet customer needs.

### Results & Benefits

SGI designs the most reliable and energy-efficient servers and storage, coupled with simplified serviceability and management. By leveraging SGI servers, Tagged has been able to save power and make its site more stable, thereby creating a better user experience for customers. Tagged saved 50 kW by converting just one tier of older machines to SGI's new Intel Xeon Processor E5-2670 servers.

Tagged has also been able to improve power capacity, space constraints and application usage within the modern data center. For example, Tagged has a contract with a San Francisco based data center for 400 kW. Before implementation, Tagged was regularly meeting and occasionally exceeding that limit. But after turning to SGI, Tagged has conserved about 78 kW of power.

In fact, Tagged has achieved such significant power-savings with SGI that the company has been able to purchase equipment for planned projects, e.g. storage for database standbys and future feature-based projects. In this way, SGI's servers have enabled the Tagged site to be more stable and provide more service to users, and allow for future company growth.

### The Tagged and SGI Partnership

Tagged has been a loyal customer of SGI for many years because of its constant need for servers that are more powerful and efficient, or that have large amounts of RAM or disk space. Tagged was originally a customer of Rackable Systems, a leading provider of servers and storage products for medium to large-scale data centers, and became an SGI customer after Rackable Systems acquired SGI in April 2009.

Looking ahead, Tagged plans to convert other backend tiers to SGI's Intel Xeon Processor E5-2670 servers as time allows.

### SGI Technology

Intel Xeon Processor E5-2670
- 20M Cache, 2.60 GHz, 8.00 GT/s Intel QPI

SGI Rackable Half-Depth Servers 1000 Series
- Leading density, with up to 84 servers in a 42U rack, 2,016 total cores.
- Integrated with software and networking, and fully tested in the factory.

### About SGI

SGI, the trusted leader in technical computing and big data, is focused on helping customers solve their most demanding business and technology challenges.