

For Alibaba, Singles Day Isn't Just About Shopping



The annual event is the ultimate test of the company's processing power

On Nov. 11, China celebrates Singles Day, a holiday dedicated to the nation's unattached. It's also the world's largest shopping festival—and a bonanza for internet giant Alibaba Group. Up to 500 million consumers will visit sites run by the company searching for discounts on items including Bordeaux wine, UGG boots, SUVs, and high-end Japanese toilets. Citigroup Inc. estimates that Alibaba's sales during this year's event could reach 158 billion yuan (\$23.8 billion).

For Alibaba, Singles Day will also be a demonstration of how far its cloud business has come in eight years. At the peak of activity, Alibaba's servers may be tasked with processing 175,000 transactions a second from its own sites. "It's the day when the largest amount of computing power is needed in China," says He Yunfei, a senior product manager for Alibaba Cloud.

Alibaba Cloud was founded in 2009 mostly to process transactions for the parent's e-commerce properties. Today its network of server and storage farms sprawled across five continents and eight countries provides computing power for millions of companies and is one of the fastest-growing units of billionaire Jack Ma's online empire. In the runup to Singles Day, retailers will use Alibaba's service to gauge how much inventory to stock, which buyers to target with ads, and how to improve on last year's delivery times.

Alibaba dominates the Chinese cloud—in part because local regulators won't issue data center operating licenses to foreign companies, curtailing the China ambitions of Amazon.com Inc. and Microsoft Corp., the No. 1 and No. 2 cloud providers globally. JPMorgan Chase estimates China's market could reach 152 billion yuan by 2021, with Alibaba accounting for 60 percent of that, double its current share. Its closest domestic rival, social media giant Tencent Holdings Ltd., could account for 20 percent. The opportunity is even greater, says He, when you consider that China is on the cusp of mass migration to the cloud.

Alibaba Cloud's more than 1 million customers include government traffic-control centers, banks, car manufacturers, and pig farms. Geely Automobile Holdings Ltd., whose IT system runs on Alibaba's cloud, relies on the service for such functions as managing its sales data and conducting virtual crash simulations. And last December, Geely ran a one-hour marketing promotion on the service that resulted in the sale of more than 2,000 Boyue SUVs. Shoppers monitored when the cars were ready for delivery via mobile apps. Another client, Royal Philips Electronics NV, has developed

several apps for its health-care services in China using Alibaba Cloud. And agriculture conglomerate New Hope Group Co. relies on the service to monitor the temperature of its hogs and how much to feed them.

A big selling point for cloud customers is so-called elastic computing, a fancy way of saying that Alibaba clients rent only the processing power they need and only when they need it. If a customer wants 10,000 servers available in half an hour, Alibaba can deliver. "Think about it, 10,000 servers," He says. "If you spent time just switching on the machines, that might take longer than half an hour."

Alibaba has a long way to go before it challenges Amazon. Last year it accounted for just 3 percent of the market for what's known as infrastructure as a service—that is, the fastest growing part of the cloud market, where companies rent servers to run their own apps and store data in the cloud. That compares with Amazon's 44 percent, according to Gartner Inc. research. Still, Alibaba is pushing beyond its home turf, setting up data centers in Japan, Singapore, and the U.S. To lure customers, the company is cutting prices by as much as 50 percent and touting a world-beating track record thwarting hackers bent on taking down websites.

It's also investing in state-of-the-art data centers. One enormous facility, in China's eastern Zhejiang province, sits on the banks of a huge artificial lake. The off-white complex looks like a giant server, with dark windowpanes and protruding red pipes and blue cisterns. The structure sucks and pumps water from the reservoir to cool down the many servers that store code and applications for Alibaba and its customers. The pumped water runs through a central canal and eventually is sent back to the lake. In winter, the water is used to heat the office. Amazon uses similar technology in its Seattle and Swiss data centers.

To bring down electricity costs, Alibaba is building server farms in the grasslands bordering Inner Mongolia to tap into wind energy, solar power, and the cool air that hovers at an average 2.6C (37F) all year. First though, Alibaba has to make it through Singles Day without crashing its cloud network. "We use it as a drill," He says. "It sharpens us."

—Lulu Chen

THE BOTTOM LINE With China on the cusp of mass migration to the cloud, Alibaba could double its share of the cloud services market there to 60 percent.