

## Alibaba Cloud Reveals Innovations for a Sustainable and Inclusive 11.11 Global Shopping Festival

- World's largest global shopping festival running 100% on cloud for the first time
- Computing resources reduced by half for every 10,000 transactions compared to last year
- Over 26,000 tons of carbon dioxide emission eliminated through use of renewable energy

**Hangzhou, China, November 16, 2021** – Alibaba Cloud, the digital technology and intelligence backbone of Alibaba Group, fully migrated all of Alibaba Group's systems and operations onto the cloud ahead of the world's largest shopping festival. Use of 100% cloud-native technologies during the 11.11 Global Shopping Festival reduced computing resources by 50% for every 10,000 transactions compared to last year. Computing efficiency was also greatly improved with a boost of 20% in technology deployment efficiency and 30% in CPU resource utilization.

"We are committed to offering 'green computing power' to meet the exponential demand from our customers for a low-carbon digital transition, and to drive the sustainable and inclusive development of our society," said **Li Cheng, Chief Technology Officer, Alibaba Group**. "Alibaba Group's 11.11 Global Shopping Festival is an important opportunity to continue pushing our boundaries with green technology and smart innovation. We're excited to serve more customers with these proven technologies across all industries and sectors."

### Levering cloud innovations to enhance sustainable shopping

Alibaba Cloud used green technologies such as liquid cooling and wind energy at its hyper-scale data centers to make 11.11 a more sustainable shopping festival. This year, the use of renewable energy in Alibaba's Zhangbei County data center helped to reduce carbon emissions by over 26,000 tons, equivalent to the amount of CO<sub>2</sub> absorbed by one million trees annually.

The scaled deployment of Hanguang 800, the first AI inference chip launched by Alibaba Cloud in 2019, significantly improved efficiency of product search and recommendation during the 11.11 Global Shopping Festival. The algorithm performance for the search function on Taobao marketplace improved by 200%, while energy costs were reduced by 58%.

Alibaba Cloud's proprietary large-scale AI model M6 also made its debut during this year's festival, which improved AI-intensive operations such as AI-powered apparel design. By drastically shortening the time required to design new clothes from multiple months to less than two weeks, M6 drives efficiency improvements in the production chain. It is estimated that M6-enabled designs, along with incorporating use of more eco-friendly materials, can reduce the carbon footprint of T-shirt manufacturing by more than 30%.

### Make shopping accessible for everyone

Alibaba Cloud aims to help merchants make online shopping more engaging and inclusive for customers through new innovations and proven technologies.

The enhanced speech recognition technology developed by Alibaba DAMO Academy was deployed as part of the new 'senior mode' on the Taobao app, which aims to make it easier for China's growing elderly population to adapt to digital life. Leveraging DAMO's proprietary algorithms for recognizing speech, a smart voice assistant called Taoxiaobao was embedded into Taobao "senior mode" to support voice search. The voice assistant can recognize Chinese-language commands in a wide range of local accents with a high accuracy rate, even against complex background noises. The voice assistant eliminates the need for users to enter text manually, addressing a pain point for elderly users who struggle to type on mobile devices.

A new "image search for medicine" feature that benefits the elderly was also introduced on the Taobao app during this year's festival. Users can search for over-the-counter medicine by taking or scanning a photo of packaging or container using Pailitao, which is the image search engine of Taobao app. Using photographic-based search eliminates the need to type in long or difficult medicine names for the elderly. The search results will return information about the medicine and its functions. This large-scale product searching was built on multi-modal AI technology that integrates proprietary Optical Character Recognition (OCR), which recognizes text printed on images and enables a higher degree of accuracy when processing medicine images. Taobao first incorporated OCR technology in 2018, processing millions of images to provide visually impaired users with better shopping experiences.

### **Putting innovation into application**

Alibaba's last-mile logistics vehicle "Xiaomanlv" was deployed at over 200 campuses across China to support package delivery during this year's festival. Over 1 million packages were delivered by 350 Xiaomanlv vehicles during the festival's initial 10-day period, surpassing the entire package delivery volume of the 12 months since the logistics robot was launched in September 2020.

Tools developed by DAMO translated tens of millions of pieces of product information to support cross-border commerce during the festival. At the same time, Alibaba's digital collaboration platform DingTalk processed 606,900 messages per second during peak time during this year's event, enabling instant and smooth communication for users on more than 30 apps across Alibaba's ecosystem.

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### **About Alibaba Cloud**

Established in 2009, Alibaba Cloud ([www.alibabacloud.com](http://www.alibabacloud.com)) is the digital technology and intelligence backbone of Alibaba Group. It offers a complete suite of cloud services to customers worldwide, including elastic computing, database, storage, network virtualization services, large-scale computing, security, management and application services, big data analytics, a machine learning platform and IoT services. Alibaba Cloud is China's leading provider of public cloud services by revenue in 2019, including PaaS and IaaS services, according to IDC. Alibaba Group is the world's third leading and Asia Pacific's leading IaaS provider by revenue in 2020 in U.S. dollars, according to Gartner's April 2021 report.

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