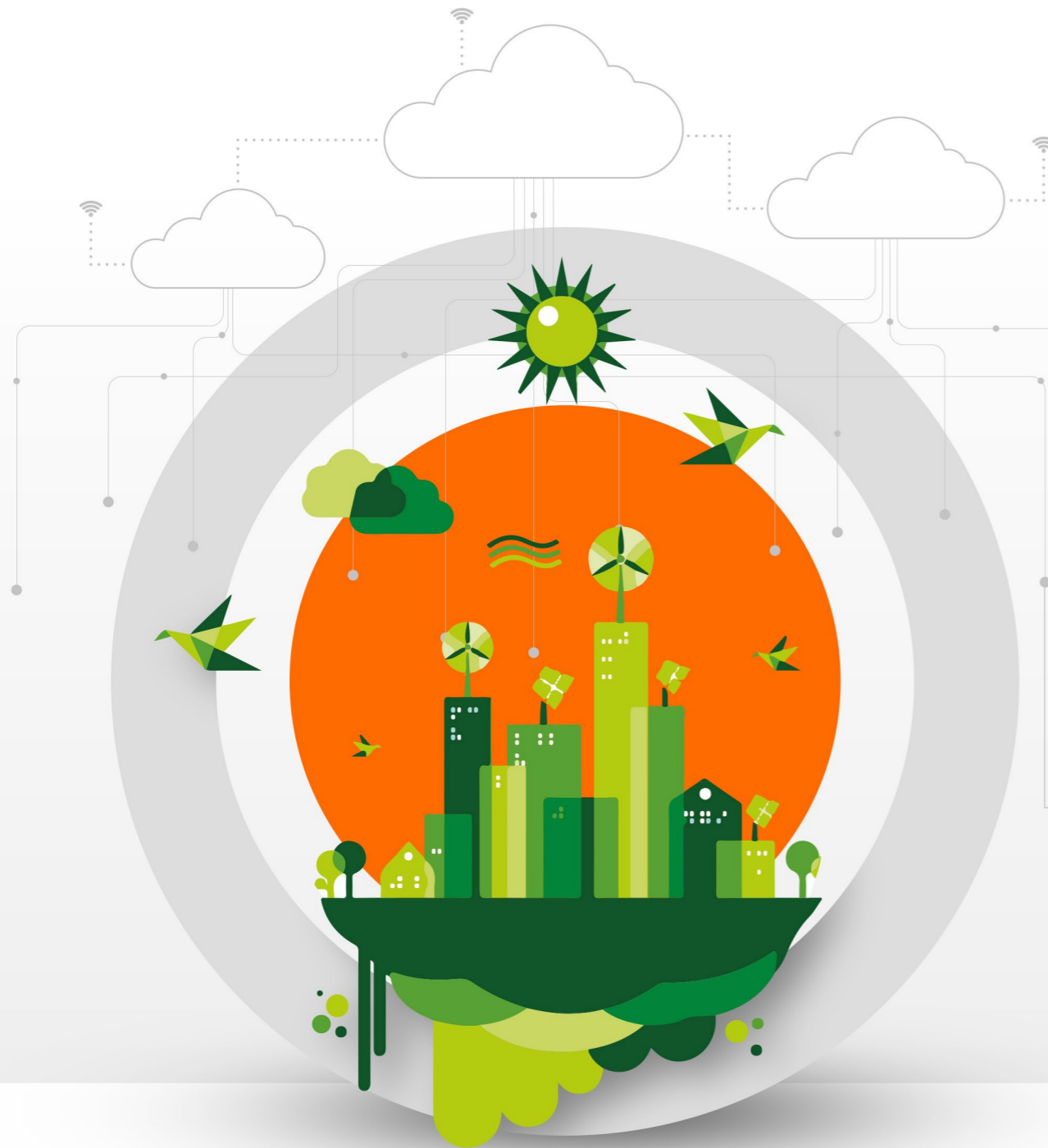


# **SUSTAINABILITY**

# **REPORT 2021**



## OVERVIEW —

At Alibaba Cloud, we aim to leverage technology to help solve societal problems that work in tandem with **Alibaba Group's Mission** -

**“To make it easy to do business anywhere.”**

At the same time, it is our collective responsibility to consider, evaluate and manage risks and opportunities, including those associated with trust, environmental, social, talents development factors.

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# 1 LETTER FROM THE GENERAL MANAGER

Humanity is evolving at a rapid pace and the history of humanity is that of revolutionary change and evolution. Each revolution in our history brought with itself a development that changed us as beings. The agricultural revolution changed the way we grew food and the industrial revolution introduced to us several tools that changed the way we function. Similarly, we are now undergoing a digital revolution that has changed the way we thought and we worked. Many things that we thought impossible before have now dramatically become a part of our lives. AI, Big Data, 5G, and IoT, and new applications for these technologies are being found seemingly every day. These digital technologies have woven themselves into our daily work and lives: we are in a new digital Intelligence world, which makes lives a little simple for everyone. Digital technology keeps moving forward, and I am thrilled to see more and more digital technologies playing increasingly important roles in promoting public good and welfare. We need to leverage this technology for change – to improve the lives of people in areas like healthcare and education. Alibaba Cloud is committed to making a strong, concerted effort to realize “technological wellbeing” by supporting people who are

making a difference. Human beings have always had the drive and creativity necessary to bring about technological innovation. We hope we can be a force for good as we move forward into the new digital age. The more innovative technologies continue to emerge, the more effort we will put into bringing them to everyone, for the benefit of society and the world.

**“Let’s unite  
together to make  
a better future.”**

A handwritten signature in black ink that reads "Selina".

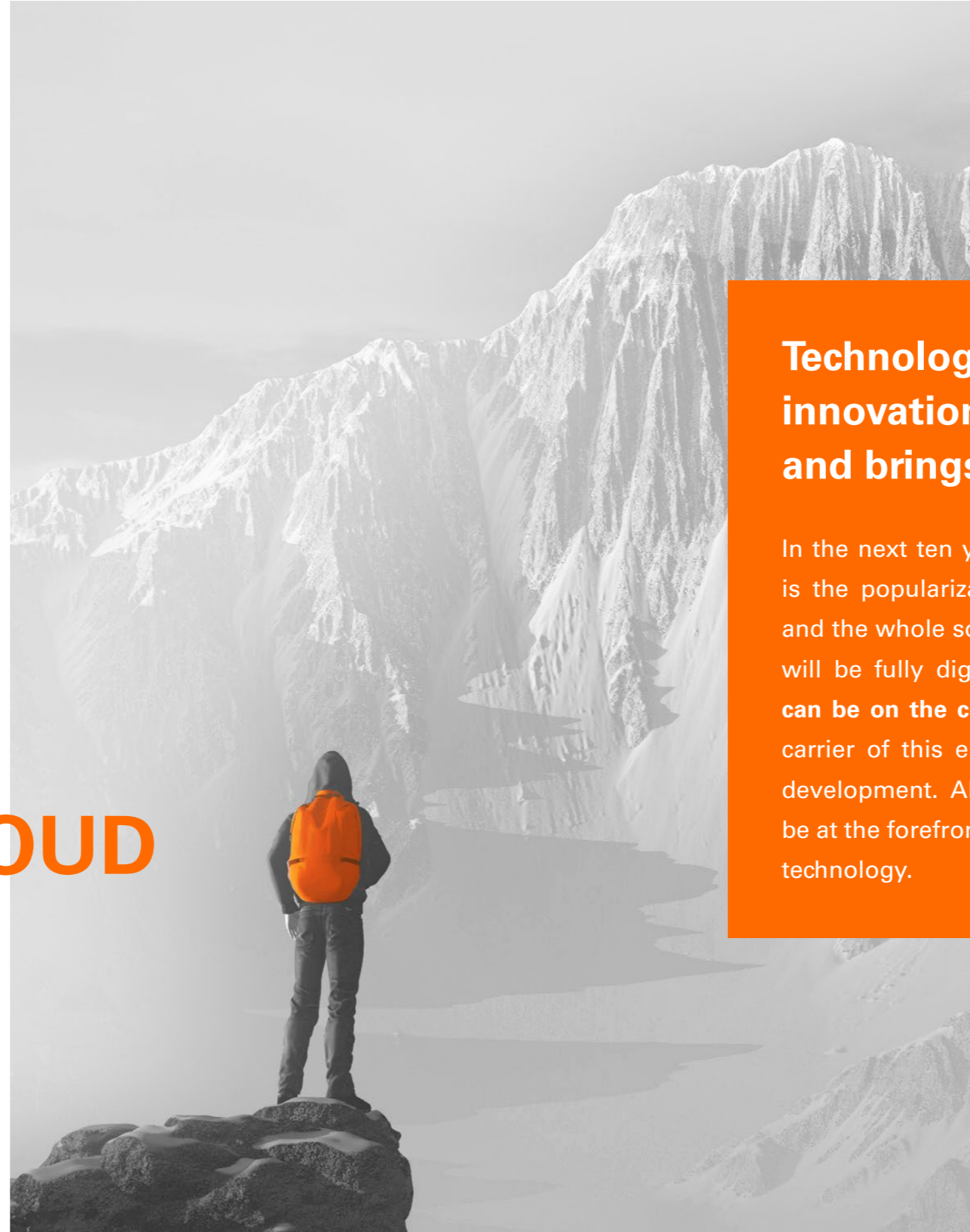
**Selina Yuan**  
General Manager, Alibaba Cloud Intelligence  
International Business Unit



## 2 ALIBABA CLOUD AT A GLANCE

# ALIBABA CLOUD

## Mission and Vision

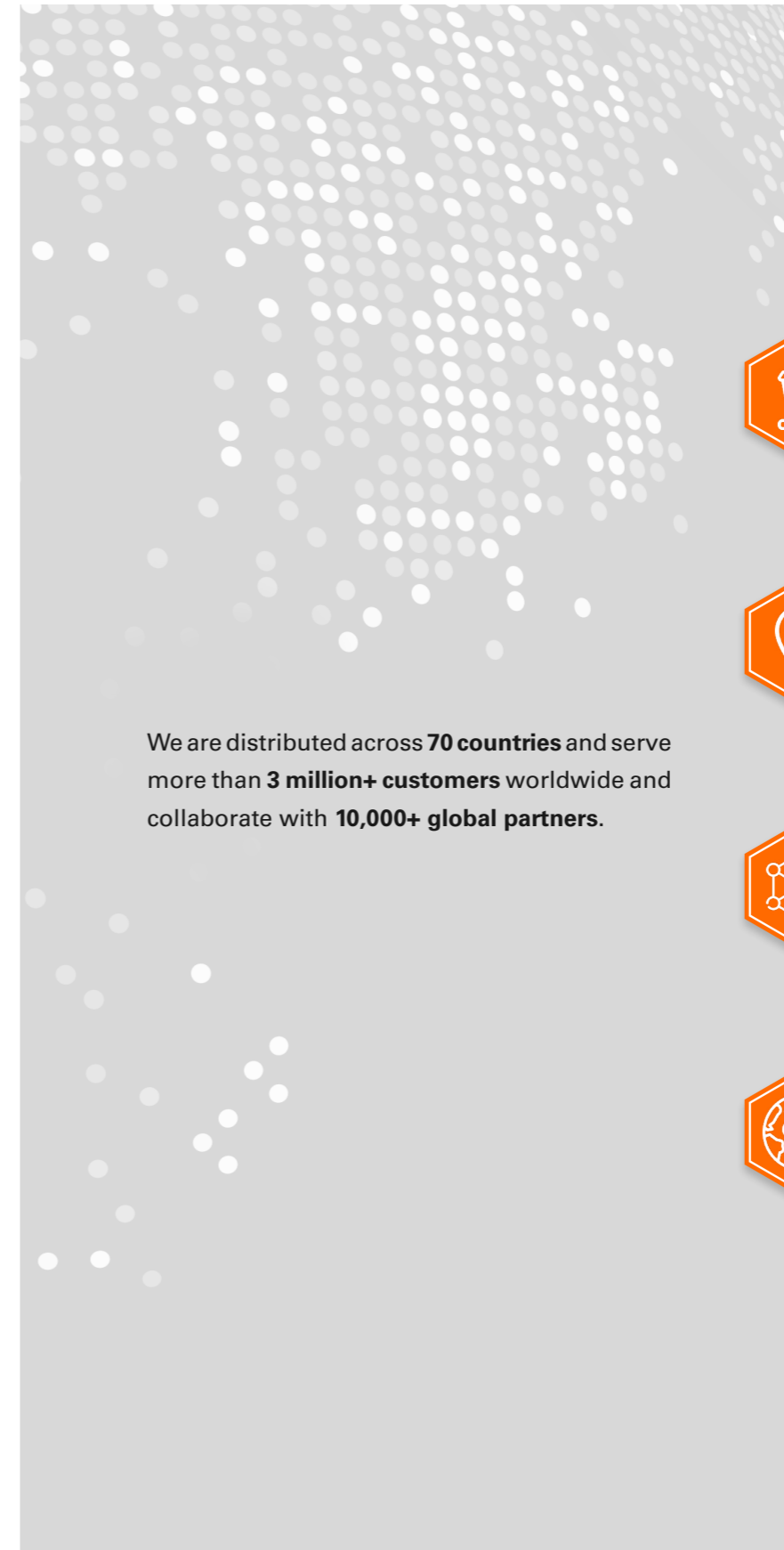
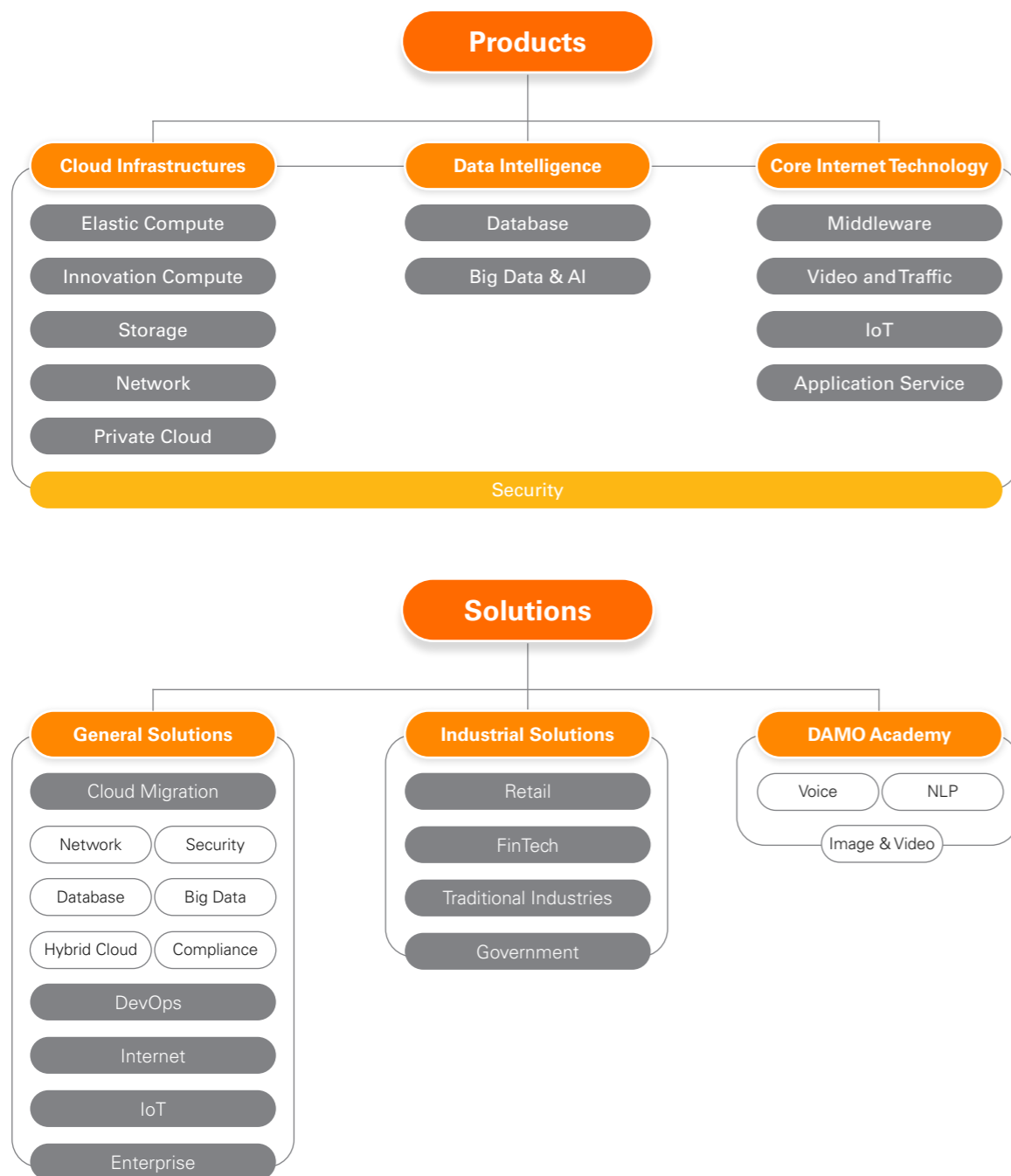


**Technology powers innovation, creates value, and brings brighter future.**





In the next ten years, the greatest certainty is the popularization of digital technology, and the whole social economy and life itself will be fully digitalized. Today, **“everything can be on the cloud”**. Cloud is becoming a carrier of this era and a symbol of digital development. Alibaba Cloud endeavors to be at the forefront of innovation powered by technology.

## A Leading Global Cloud Provider

We are a leading global cloud provider of innovative, secure cloud services that help organizations accelerate their digitization. Our products provide comprehensive solutions and enhanced support plans to help businesses scale up their IT offering.

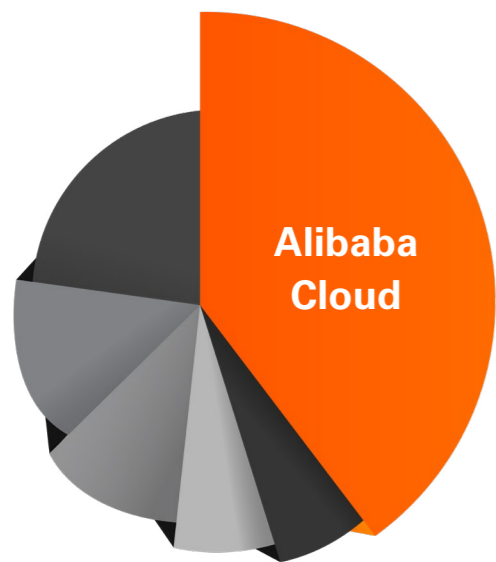


We are distributed across **70 countries** and serve more than **3 million+ customers** worldwide and collaborate with **10,000+ global partners**.

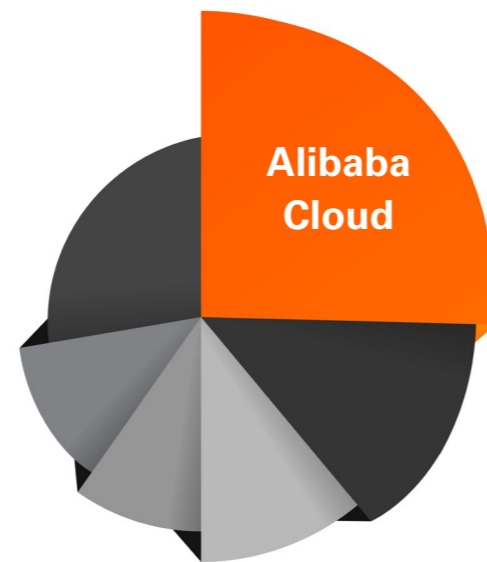
- 
**24**  
**Alibaba Cloud Regions**
- 
**75**  
**Availability Zones**
- 
**2,800+**  
**CDN Nodes**
- 
**200+**  
**Countries and Regions**

## Creating Headlines: International Standing

Global market research organizations like Gartner and IDC have recognized Alibaba Cloud as the No.1 Public Cloud Provider in China and APAC.

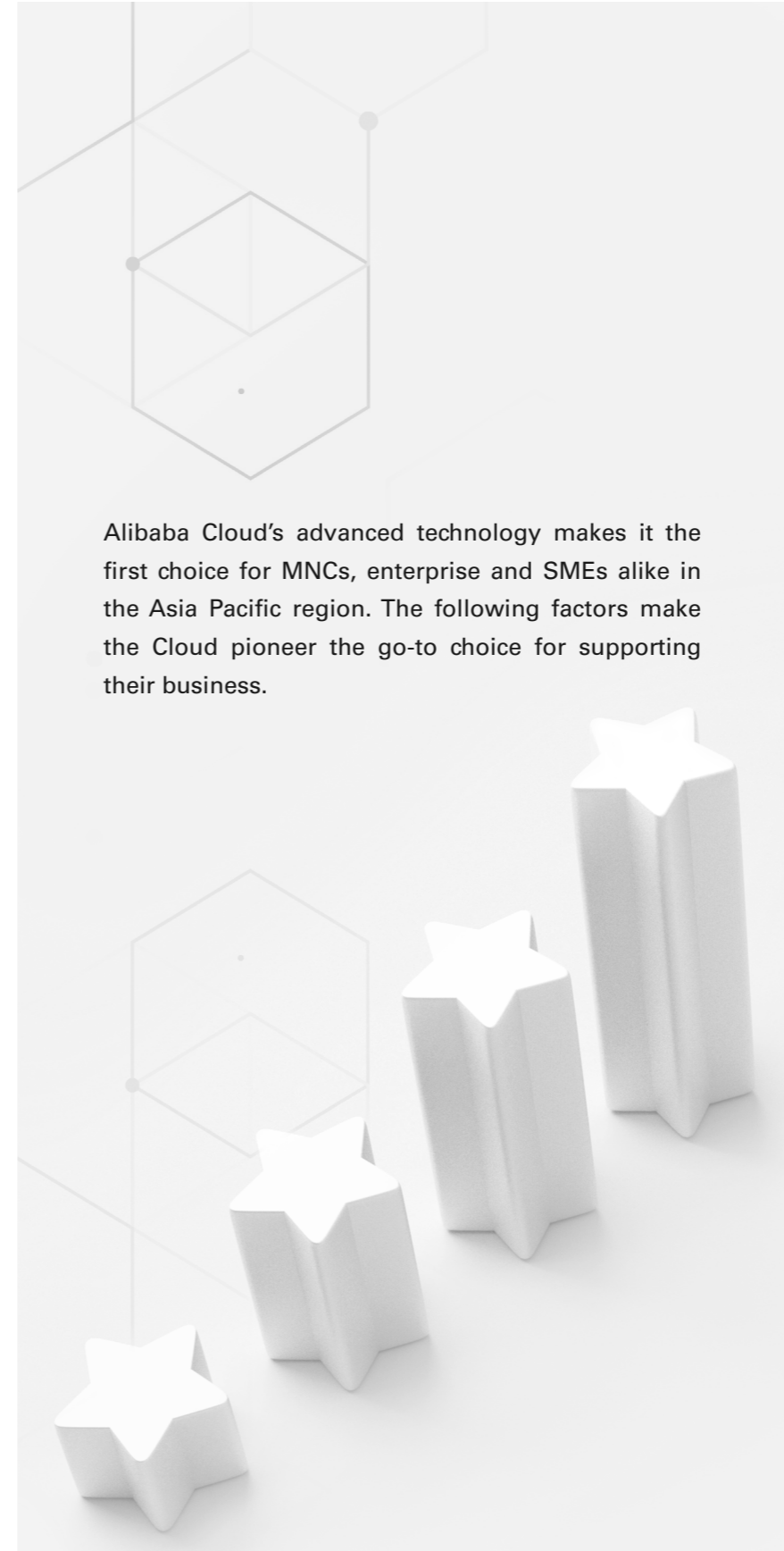


Source: IDC China Public Cloud Service Tracker, 2021 Q1



Source: Gartner Market Share: IT Services, 2020

### Alibaba Cloud's Market Share in China and APAC Region



Alibaba Cloud's advanced technology makes it the first choice for MNCs, enterprise and SMEs alike in the Asia Pacific region. The following factors make the Cloud pioneer the go-to choice for supporting their business.

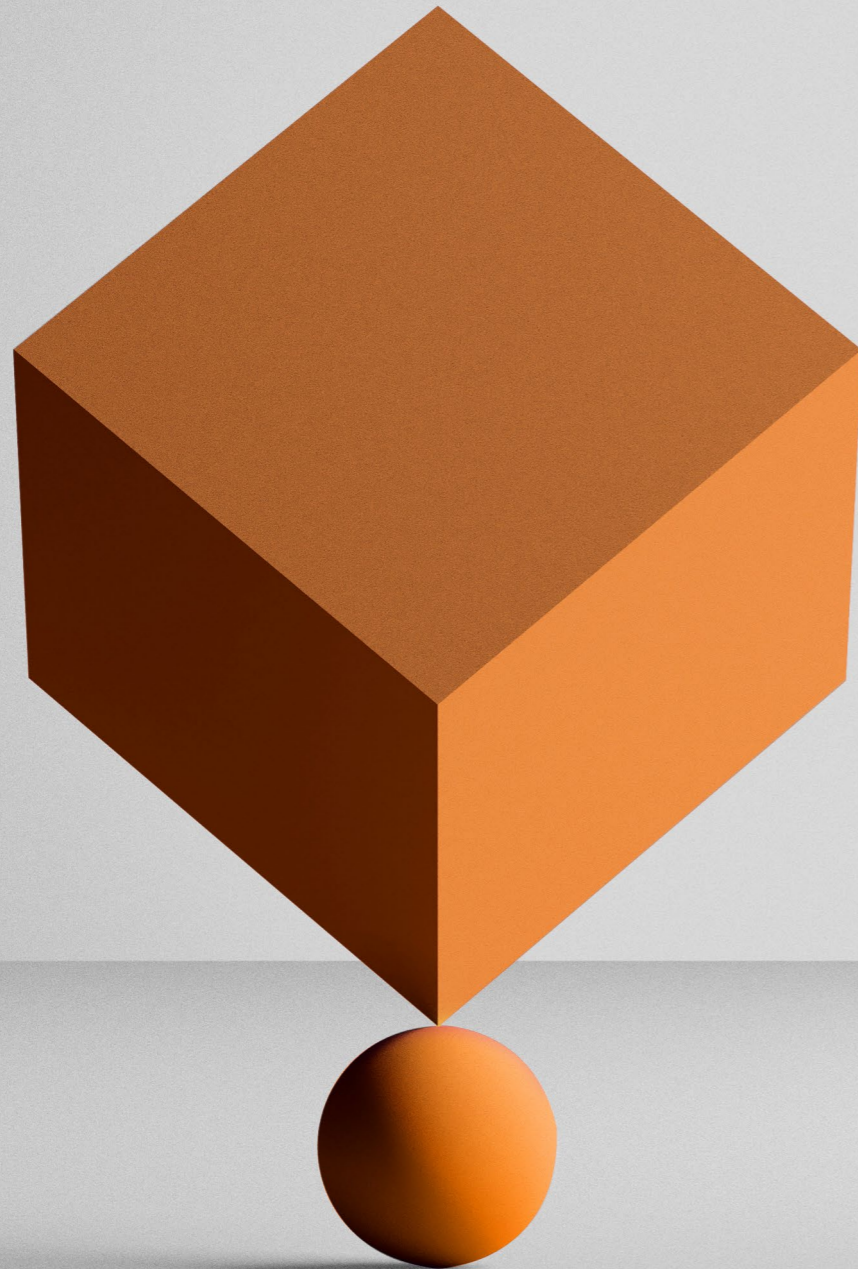
Rated as **LEADER**  
in Gartner Magic Quadrant 2020  
for **Cloud Database  
Management System**

**No.1 WAF**  
in Greater China by  
**Gartner**

**Function Compute**  
Enters the **Forrester  
Leader Quadrant** for  
the first time in March 2021

Placed in the **Visionaries**  
quadrant of the **Magic  
Quadrant for Cloud  
Infrastructure and  
Platform Services** report  
published on 27 July 2021.





# 3 BUILDING TRUST BY DELIVERING EXCELLENCE

At Alibaba Cloud, we strive for high standards and quality in our products and services, we are committed to providing stable, reliable, secure, and compliant cloud computing infrastructure services.

## Alibaba Cloud Security Capabilities

Alibaba Cloud's security capabilities are the backbone of our offerings. By leveraging years of experience and professional expertise in defense against Internet security threats, Alibaba Cloud provides security protection for the cloud platform and implements various compliance requirements into the internal control program and product design of the cloud platform. In addition, Alibaba Cloud has participated and contributed to the development of multiple standards and best practices for the cloud industry.



Safeguards against **50%** of DDoS attacks in China



Supports **1 million** businesses in China



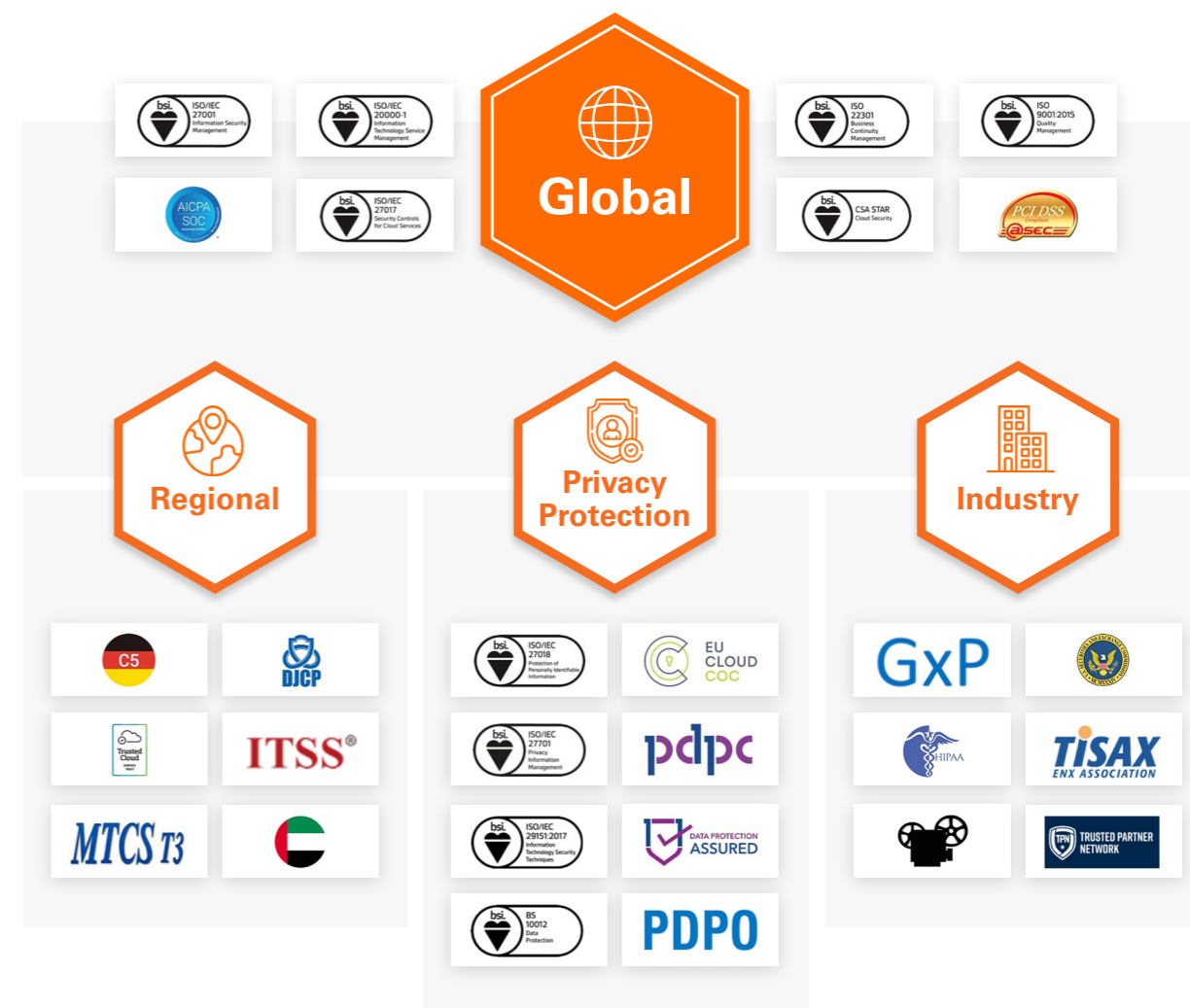
Defends against **8 million** attacks everyday



Protects **200 million** password cracks everyday

## Global Compliance

Alibaba Cloud adheres to international information security standards and is committed to using international best practices to protect customers' personal information and comply with applicable laws of countries where it operates.



Alibaba Cloud Security Compliance

## Europe Cloud Code of Compliance

Alibaba Cloud adheres to the EU Cloud Code of Conduct. We have been verified to be adherent to and compliant with the EU Cloud Code of Conduct by SCOPE Europe, the Code's independent monitoring body.

Alibaba Cloud is a founding member of the **EU Cloud Code of Conduct** and the General Assembly, which is actively involved in the formulation of a code of conduct for EU cloud services in accordance with the requirements of GDPR article 40.



Alibaba Cloud ensures its customers implement **General Data Protection Regulation (GDPR)** related measures.



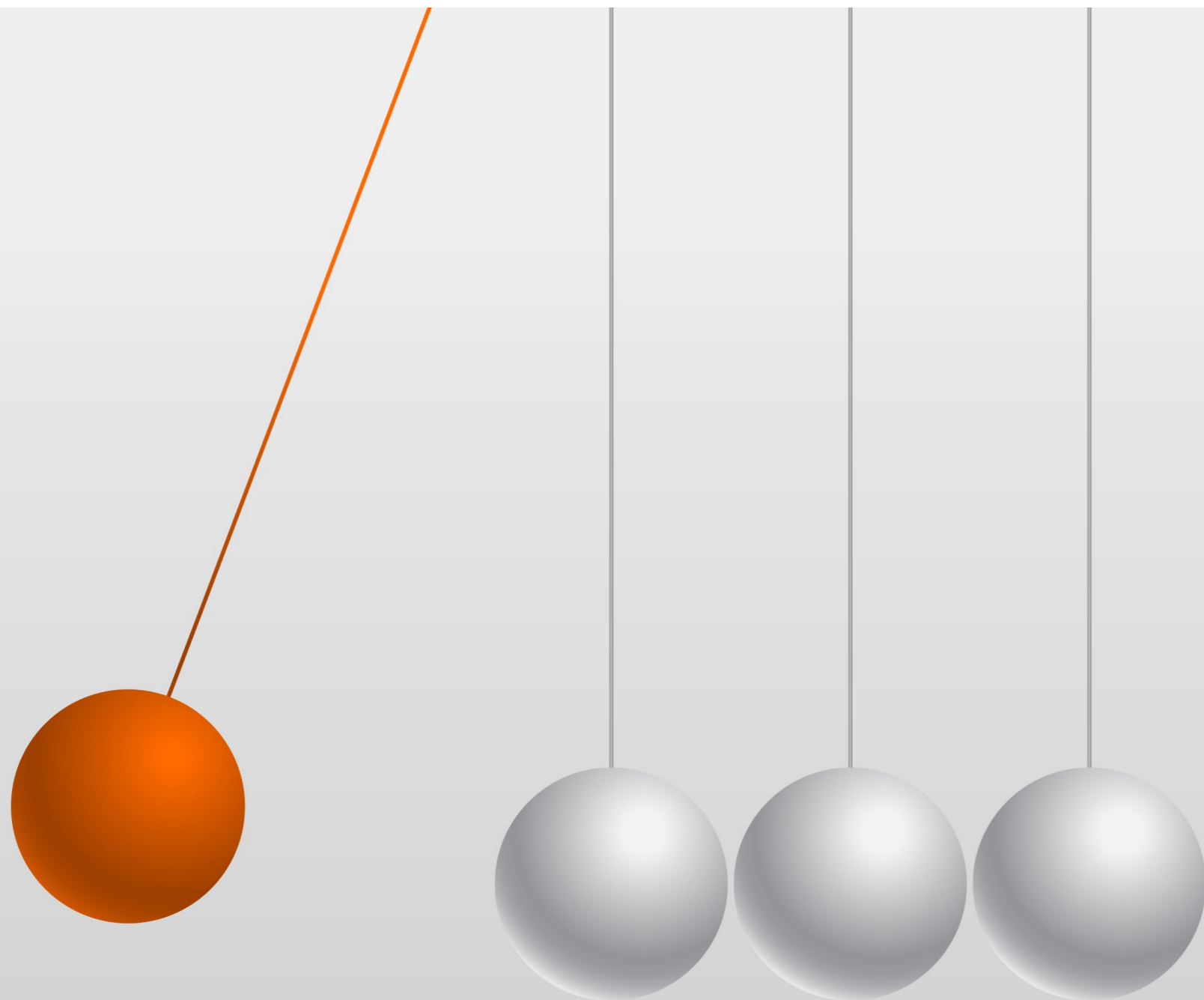
Alibaba Cloud's **monitoring scheme applies strong safeguards** to meet all requirements set out in the EU Cloud Code.



Alibaba Cloud services comply with the **transparency and privacy protection requirements in Europe**.



Alibaba Cloud supports Code compliance by ensuring **independent third-party certificates and audits**.



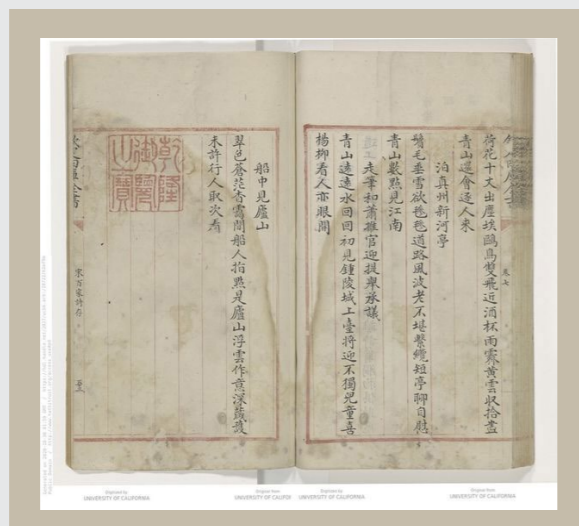
# 4 MAKING SOCIAL IMPACT FOR THE LARGER COMMUNITY.

Alibaba Cloud makes it a point to continue to invest in resources and cutting-edge technology to support projects that are in line with our values and belief.

## Machine Learning to Digitize Chinese Classics

Alibaba DAMO Academy's new project is to digitize Chinese classics together with the Alibaba Foundation, the Library of the University of California, Berkeley, Sichuan University, National Library of China, and Zhejiang Library.

The program aims to digitize and aggregate ancient Chinese books through optical character recognition (OCR) and convert scanned images into texts for open access and facilitate machine-reading.



## Inclusive Healthcare for the Underprivileged: DoctorSHARE

DoctorSHARE, a non-profit organization focusing on healthcare services and humanitarian aid, provides rural residents in Indonesia with access to healthcare information. Alibaba Cloud works with our local partner, Medico.id, to support this valuable drive by improving access to healthcare services for Indonesians living in big cities and remote and rural areas.



Alibaba Cloud provides cloud computing resources to support the healthcare information platform operated by Medico.id to help patients access the platform via an application to get teleconsultation services and video calls with reputable doctors. The platform also offers free consultations to patients visiting the Nusa Waluya II Floating Hospital, one of DoctorSHARE's programs in far-reaching remote areas.

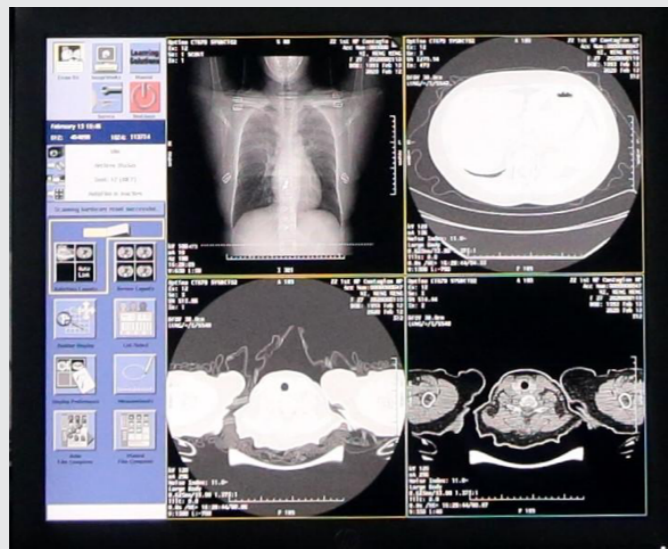


“  
**Floating Hospital shall benefit more than 2,000 general patients and 60 surgical patients monthly.**

“  
**Dr. Lie Dharmawan,  
 Founder of DoctorSHARE**

## Coronavirus CT Analytics

Alibaba Cloud is responding to the COVID-19 by making powerful cloud-based computational platforms and resources available to researchers worldwide. The Alibaba Cloud CT Image Analytics technology relies on cutting-edge deep learning algorithms, which have been trained using 5,000 cases to understand the differences between COVID-19 pneumonia, common pneumonia, and other conditions.



AI CT Scan



**96% accuracy**

in identifying coronavirus pneumonia characteristics in CT scans.



**60 times faster**

than human detection methods.



**160+**

public institutions in China are currently using this technology.



**13,000+**

CT images analyzed per day on average.

## World Hunger Map: The UN and Alibaba Cloud Initiative

Alibaba, in collaboration with the UN World Food Program (WFP), has created a “Hunger Map LIVE”. It has created a groundbreaking global hunger monitoring system that uses **Artificial Intelligence (AI), machine learning, and data analytics** to predict and track the magnitude and severity of hunger in **over 90 countries** in near real-time.

Hunger Map LIVE brings together streams of publicly available information on food security, nutrition, conflict, weather, and a variety of macro-economic data all in one place to show a holistic picture of the food security situation.

“Alibaba has a very great reputation for innovation and problem solving. This is the first engagement we had with Alibaba, and we are very pleased with the way it’s gone.”

**Stanlake J.T.M Samkange**  
Senior Director for Strategic  
Partnerships of the United Nations  
World Food Programme



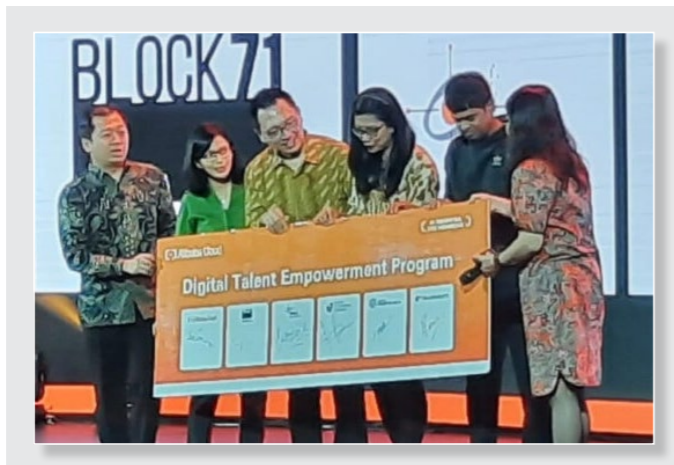


# 5 DIGITAL TALENT PAVING THE TECHNOLOGICAL FUTURE.

## SEA Country Digital Talent Nurturing Programs

### Digital Talent Empowerment Program in Partnership with Universities

We believe in nurturing more talent with Cloud and data intelligence know-how in order to meet the digital transformation needs of various businesses in Southeast Asia and beyond. **Digital Talent Empowerment Program** is our initiative in partnership with **Binus University** and **Universitas Prasetya Mulya** to offer Cloud and digital intelligence courses among students and instructors.



▲ **Binus University Partners with Alibaba to Offer “Digital Talent Empowerment Program”**

### Digital Talent Empowerment Program Highlights

**Around 60 instructors or lecturers** attended free training programs and workshops in 2020.

**Partnership with Inovasi Informatika (i3)** to offer advanced IT courses for developers in Indonesia.

**Partnership with BLOCK71 Jakarta** to provide training to enhance the digital skills of workers in startups.

**Partnership with Trainocate and PT**, global training institutions, to ensure world-class skill development.



## Alibaba-NTU Joint Research Institute

Alibaba Group partners with Singapore's Nanyang Technological University (NTU) in a first-of-its-kind outside China collaboration to bring together Alibaba Cloud and NTU's AI capabilities. The joint research institute **aims to make people "healthier, smarter, and happier" through AI.**

## The partnership between Alibaba and NTU involves 50 scientists and engineers from both sides over five years

since 2018 to develop AI solutions with real-life applications, ranging from the home and retail to healthcare and transportation.



The partnership focuses to develop multiple AI applications by leveraging NTU and Alibaba's expertise in natural language processing, machine learning, and cloud computing across areas such as retail, urban transport, and healthcare. For instance, NTU's expertise in healthcare research and Alibaba's know-how in AI will be put to use for achieving breakthroughs in health-related AI. To date, more than 50 translational research projects have been initiated. The research outcomes have been published in many top international conferences and journals.

The cooperation is expanded in new areas of training and establishes a Digital Talent Program, where we leverage NTU's MiniMasters curriculum for the senior professionals in the tech companies and public sectors. The curriculum includes comprehensive digital courses for Big Data and AI, access to online cloud labs, and an opportunity to gain the mini master certificates. Moreover, both parties will look into enterprises' digital transformation topic and call on global developers to take the AI challenge.



## Gender Equality with Women of Power: Alibaba Cloud Internal Talent Development Program

The World Economic Forum's 2020 Global Gender Gap Report unveiled that females filled only 26 percent of job roles in artificial intelligence (AI) and big data. This gender gap is even more apparent in cloud-related roles where women only make up 12 percent of the entire workforce. These statistics hint at the barriers faced by women everywhere, holding them back from achieving their full potential.

Alibaba Cloud continuously tries to unlock greater opportunities for the development of women in the technology sector.

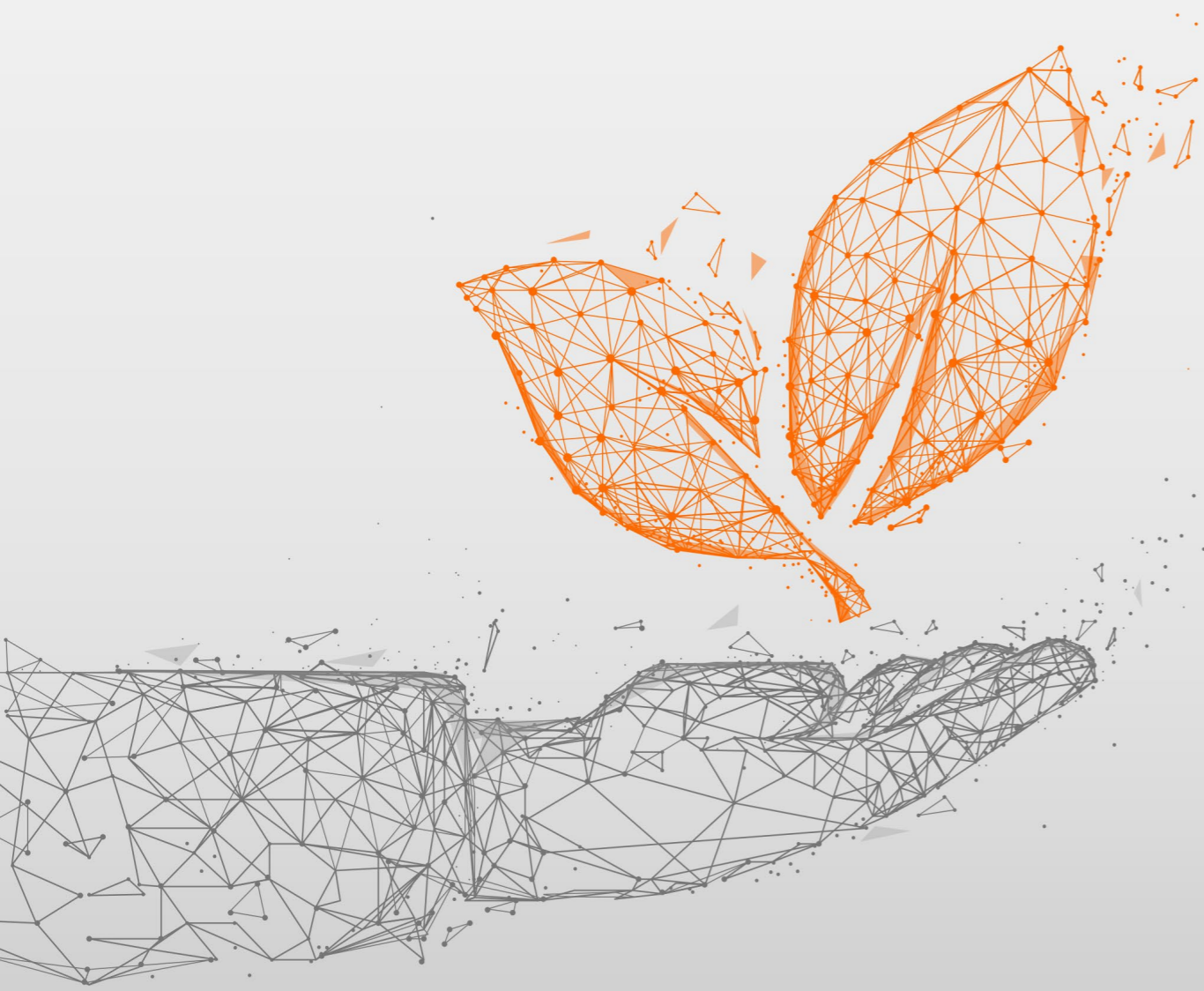
- Women represent almost half of the organization, **with female executives making up 34%** of our total workforce.
- **Women hold key roles at Alibaba Cloud**, from world-renowned data intelligence scientists to product architects who plan digital transformation in emerging markets.
- Collaborating with **top post-secondary and higher learning institutions across Asia** to nurture a strong pipeline of female AI talent in the region.
- **Providing AI training programs to students and raising interest in science-related subjects** amongst female students through a partnership with secondary schools in Singapore.

## iamtheCODE Partnership

Alibaba Cloud partnered with African nonprofit iamtheCODE to teach 1 million women and girls across the globe computer programming by 2030. Alibaba Cloud will offer free online training and free access to cloud-computing resources to female programmers in marginalized communities to aid iamtheCODE in its mission. Founder of iamtheCODE.

The tie-up with Alibaba Cloud would allow the organization to reach more disadvantaged women, making its curriculum "even more accessible." Participants will also receive certificate to indicate they've passed exams after completing courses ranging from cloud computing and data analysis to machine learning and security.





# 6 ENVIRONMENT PROTECTION AT CORE

At Alibaba Cloud, we believe acting in a socially responsible way is part of our business model. Since our inception, we have been highly committed to supporting and participating in socially responsible projects that align with our core values and mission and to establishing a technology-driven sustainable ecosystem to extend the benefits of our technological capabilities to the community at large.

## Innovative Green International Data Centers

Building eco-friendly data centers are part of Alibaba Cloud's approach to environmental conservation and sustainable operations. Data centers running on clean and renewable resources will change the world with their vast computing power and help protect our precious natural resources for the long term.



Alibaba Cloud has **5 Green Data Centers** across China, which is the world's only liquid cooling cluster deployed on such a large scale.

Water-cooling technology at East China Data Center **ensures free cooling for 90% of its operating time, driving down energy consumption by more than 80%** compared to mechanical cooling.

The unique "soaking server" cooling technology **saves more than 70% of energy and reduces the average annual PUE to 1.09** (lowest in the world).

Compared to traditional data centers, Alibaba Cloud Hangzhou data center **saves 70 million kilowatt-hours of electricity each year.**

## Other Green Initiatives

With 400 million individual users and more than 17 million companies and organizations, DingTalk's paperless office initiative has **saved 11.23 million tons of carbon emissions** as of December 31, 2020.

On a large-scale waste incineration power generation unit in Southwest China, Alibaba Cloud uses AI algorithms to help customers increase the incineration efficiency of solid waste by 2.6%. This helped **reduce carbon emissions by about 48% compared to before.**

In Panzihua Iron and Steel, with intelligent technologies **1.2 kilograms of iron can be saved for every ton of steel produced.**

In Hangzhou **the congestion rate is reduced by 15%** through smart transportation, effectively reducing the carbon emissions caused by traffic jams.





# 7 CONCLUDING THOUGHTS

While we always make it a point to communicate our strategies and intentions to our key stakeholders, this report aims to delve deeper into our strategies going forward. This report denotes an essential milestone in our journey as an organization in the past year. It gives an outline of periodic updates of our sustainability strategy and activities in the future. In creating this sustainability report, we focused on the risks and opportunities that are most critical to our long-term sustainability as a business and our ambitions for the Alibaba Digital Economy. The process has deepened our resolve to keep corporate governance, IPR protection, cybersecurity, data protection, human capital, social contribution, and the environment top of our agenda.

Since we know that the stakeholders at the helm look for an overall growth marker of the company, which includes looking at our efforts from a holistic viewpoint of our role as responsible actors in the global community, not just from a financial standpoint. We hope that this sustainability report has given you a fresh understanding of the integrated and comprehensive nature of sustainability issues in our culture and business model. Please feel free to reach out to us for a dialogue about these issues. We welcome your feedback.

 Alibaba Cloud

[www.alibabacloud.com](http://www.alibabacloud.com)

