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INTRODUCTION

Ten years ago, Alibaba Cloud was established in conjunction with Alibaba Group's own 10th anniversary celebrations. Now, we're celebrating a decade of Alibaba Cloud.

As we've grown our business and realized many successes over the years, it is clear that there is no better environment than the cloud for the continuous improvement of your business.

We've supported our organizations both large and small all over the world and now have more than one million paying customers and 2,800+ CDN worldwide nodes in 61 Availably Zones across 200+ countries and regions.¹

We have also developed 162 products and activated 4,610 product features and functions – an average of more than one a day.²

Over the last decade, we've learnt thousands of takeaways about building and operating products and services that are highly scalable, reliable and secure, with predictable performance at the lowest possible cost.

We wanted to share this knowledge with you. So, we have condensed these experiences into 10 key takeaways to help any organization understand how to scale and succeed in the years ahead.



TAKEAWAY #1: BE ADAPTABLE



THE ALIBABA DOUBLE
11 SHOPPING DAY
FESTIVAL HAS SEEN
PEAK TRANSACTION
VOLUME INCREASE
800 TIMES

The digital landscape is in constant flux. When we first launched Alibaba Cloud, we knew that the solutions we were building back then would need to evolve to meet the changing demands of our customers in the future.

The annual Alibaba <u>Double 11 Shopping Festival</u> (Singles' Day) was one of our first major projects. It's also in its tenth year, and over this period we've witnessed our transaction volumes increase by 280 times and peak transaction volume increase more than 800 times.³

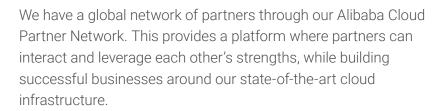
We've risen to the challenges of such rapid growth across our organization, including technical breakthroughs in distributed architecture, remote multi-active architecture, throttling and downgrades, and comprehensive stress testing to provide seamless scalability and stability.

We've optimized costs by focusing on efficiency improvements across our architecture. To do this, we sample and analyze the technical variables on our 11.11 campaigns. As a result, we can make predictions from a microcosmic perspective, using machine learning algorithms to help make intelligent decisions.

» **Key takeaway:** Be ready to evolve your solutions from day one.

TAKEAWAY #2: BRING IN THE EXPERTS

No one organization is an expert in everything and you may need to outsource or acquire the rights skills for your business.



Such partnerships have brought many benefits to Alibaba Cloud and our customers over the years. For example, in 2018, Starbucks and Alibaba partnered with the aim of transforming China's coffee experience. The partnership sees many elements of Alibaba's ecosystem used to dramatically enhance Starbuck's retail spaces and delivery offering. This includes a virtual store embedded into Alibaba's and Starbucks' mobile apps, delivery-focused Star Kitchens and using technologies such as Augmented Reality to enhance the retail experience.

» **Key takeaway:** Cultivate a strong partner network to maintain growth and innovation.



ALIBABA CLOUD HAS A STRONG PARTNER NETWORK THAT KEEPS IT AT THE FOREFRONT OF INNOVATION AND EXPERTISE

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In 2018, Starbucks and Alibaba partnered with the aim of transforming China's coffee experience."

TAKEAWAY #3: SECURITY MATTERS

In our increasingly digitized world, data is the new corporate currency. So, your online security is more important than ever and should be built from the ground up.



ALIBABA CLOUD ENCRYPTION IS NOW A MATURE DATA PROTECTION SOLUTION From day one, we provided a full set of <u>security solutions</u>, which has evolved to now include Anti-DDoS, WAF, malware protection, and extensive compliance and vulnerability detection, to name a few.

Over the last decade, we've continually protected our customers against a range of emerging online threats, which we've seen increase in both scale and impact. Bot attacks, where a web browser is emulated by cyber criminals to harvest data from a website, for example, are now a prevalent threat which our Anti-Bot Service protects against.

We've also seen major changes in encryption, which is now a mature data protection solution. As encryption has increased in popularity, we launched the Key Management Service where customers can create, delete and manage their encrypted keys to protect their data.

» Key takeaway: Robust security is the bedrock of a successful business.



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TAKEAWAY #4: DO THE MATH

How much storage will I need? How many resources should I deploy? What level of service can I expect? How much will it cost?

These are just some of the questions our customers regularly ask when we start working with them. Over the years, it has become clear to us that we need to understand our resource usage and also be adaptable and transparent in our pricing plans to give our customers the most cost-effective solution for their business.

So, we're always upfront about our <u>Pricing</u>, where we offer customers Prepaid and Pay-As-You-Go payment methods. While the Prepaid option gives you economies of scale, the Pay-As-You-Go method means you only pay for the resources you actually use.

We also provide clear <u>Service Level Agreements (SLAs)</u> across our portfolio of products and services.

» Key takeaway: Be transparent with your SLAs and pricing. Strive for cost-effectiveness.



TAKEAWAY #5: EXPECT THE UNEXPECTED



ALIBABA CLOUD
HAS TACKLED
APPLICATION
LATENCY BY
INTEGRATING
MACHINE LEARNING

User expectations have skyrocketed over the last decade, as has demand for mobile technologies. For example, research reveals 47 percent of users expect a website to load in less than two seconds.8

At Alibaba Cloud, we have proactively prepared our systems against downtime and latency – giving our customers the power to react to such issues and seamlessly serve their customers.

For example, in 2018, we launched our <u>Hybrid Disaster Recovery</u> (HDR) and Hybrid Backup Recovery (HBR) services, which provide an end-to-end DR solution. These overcome costly and complex O&M issues often associated with traditional, self-built disaster recovery solutions.

We've continually addressed latency over the last 10 years, upgrading our software and reducing the physical distance between users and servers. More recently, we've tackled application latency during times of peak performance by integrating machine learning into our hardware and software.

» Key takeaway: Proactively prepare for downtime and latency to boost user satisfaction.

TAKEAWAY #6: EMPOWER UX

Our customers often move to the cloud leaving limited, legacy systems behind, and do not want to be constrained by their new systems.

We quickly realized that our customers needed highly configurable cloud environments to meet their diverse business needs. What works for one organization will not necessarily work for another. And they also need support to deploy and maintain their cloud infrastructure.

We developed our intuitive dashboard to give our customers the freedom to pick the right solution from our comprehensive suite of products and services and manage that solution, while we manage the cloud back-end.

This dashboard provides the perfect balance for our customers. It gives them a consistent and user-friendly environment with support available from our expert team, if required.

» **Key takeaway:** Empower your customers by giving them the right balance of support and control.



ALIBABA CLOUD HAS A USER-FRIENDLY INTUITIVE DASHBOARD

TAKEAWAY #7: EMBRACE DEVELOPER RESOURCES

From the Internet of Things to social networks and big data, APIs have provided a catalyst for many innovations across the IT industry that are now used frequently in our day-to-day lives.

To facilitate this growth, our range of <u>Developer Resources</u> has expanded significantly over the last 10 years. We now have a dedicated API Gateway, which includes a hosting service and a marketplace, and an SDK to give developers access to our services and manage their apps in their language of choice.

Our new SaaS Accelerator allows our partners to easily build and launch SaaS (Software-as-a-Service) applications and leverage Alibaba's proven business and technology know-how. The accelerator helps SaaS customers quickly deploy and test their applications on the cloud, shorten their implementation lifecycles, and accelerate time-to-market.

Such tools help businesses innovate without reinventing the wheel and form strong developer connections.

» Key takeaway: Use APIs and an SDK to encourage innovation and collaboration within the developer community.



TAKEAWAY #8: AUTOMATION IS KEY

In our increasingly dynamic and digitized world, businesses demand minimal O&M from their IT infrastructures.



DATA AUTOMATION
CAN BE IMPLEMENTED
WITH ALIBABA CLOUD
DATAPHIN

At Alibaba Cloud, we've always recognized the value in automation. In 2011, we developed the Sigma scheduling system, which helped the 11.11 Shopping Festival's infrastructure seamlessly scale to meet demand for the hundreds of millions of users conducting transactions of Alibaba's websites.

Now, we're continuing to embrace automation with the new Dataphin, which brings automation to data warehousing and data asset management, and are continuing with the development of our cutting-edge AI tools.

» Key takeaway: Embrace automation to reduce your overheads and win business.



TAKEAWAY #9: DATA IS KING



MAXCOMPUTE NOW SUPPORTS STORING EXABYTES OF DATA Data has transformed companies' understanding of their customers and enabled incredible efficiencies across numerous aspects of business, with many investing heavily in the development of big data technology.

Alibaba Cloud has led the charge in the big data era with its renowned product – MaxCompute. This solution launched 10 years ago, making it one of the first independently developed big data computing platforms in China.

MaxCompute now supports storing exabytes of data and can compute hundreds of petabytes of data daily. MaxCompute has been providing services to enterprises in various sectors in more than 10 regions inside and outside of Mainland China. These sectors include e-commerce, industry, healthcare, agriculture, meteorology, and education.

Now, MaxCompute is able to easily process large amounts of data to serve society and consumers. It is just one component in our full suite of advanced big data and analytics solutions, that help businesses capitalize on their data in new and innovative ways and compete better in today's digital world.

» Key takeaway: Use your data intelligently to future proof your business.

TAKEAWAY #10: INNOVATE OBSESSIVELY



ALIBABA CLOUD
INVESTS HEAVILY IN
R&D TO DEVELOP THE
FUTURE OF CLOUD
COMPUTING

The digital landscape is in constant flux. Who knows what it will look like in 10 years' time? So, if you want your organization to survive, you need to embrace innovation.

At Alibaba Cloud, we invest heavily in R&D to keep our finger on the pulse and ensure our rich suite of innovative products and services allow our customers to benefit from the lasted technological advances.

For example, our expertise in machine learning is demonstrated in our recently-launched ultra-intelligent AI platform Alibaba Cloud City Brain, which solves complex business and social problems. In 2018, our Alibaba Cloud Sports Brain was used at the PyeongChang Olympic Winter Games as a means to redefine engagement between fans, organizers, venues and athletes using data intelligence and machine learning.

Alibaba Cloud also became the official Cloud Services Partner of the Olympic Games in 2017. Speaking in a statement, Chris Tung, CMO of Alibaba Group, said: "Over the next 10 years, Alibaba Cloud services will serve as the foundation of our efforts to drive the digital transformation of the Games, creating a more efficient and enjoyable experience for all audiences." 10

Our hard work and innovation are clearly paying off. The 2018 Alibaba 11.11 Shopping Festival was the biggest yet, thanks to our range of innovative network services and technology. We were also recently included in the Visionaries Quadrant of Gartner's Magic Quadrant for Infrastructure as a Service (laaS) were ranked as the number one laaS provider in Asia Pacific by Gartner, and became the presenting partner for the FIFA Club World Cup.

» Key takeaway: Embrace innovation to expand and realize future success.

WHAT'S NEXT?

At Alibaba Cloud, we've realized tremendous success over the last 10 years and are looking forward to the next decade, and beyond.

We will continue to work tirelessly towards our vision of allowing every organization to do business anywhere, with anyone in the world.

If you'd like to try our extensive suite of products and services, you can sign up for an Alibaba Cloud <u>free trial</u> service. Here, you can access up to \$300 (for individuals) or \$1,200 (for enterprises) worth of products and services across our platform.

If you would like to learn more about Alibaba Cloud and how we can help your business, please contact us at www.alibabacloud.com/contact-sales.

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ABOUT

Established in September 2009, Alibaba Cloud is the cloud computing arm of Alibaba Group and develops highly scalable platforms for cloud computing and data management.

It provides a comprehensive suite of cloud computing services available from www.alibabacloud.com to support participants of Alibaba Group's online and mobile commerce ecosystem, including sellers and other third-party customers and businesses.

Alibaba Cloud is a business within Alibaba Group which is listed on the New York Stock Exchange (NYSE) under the symbol BABA.

www.alibabacloud.com/contact-sales