

CLOUD TRANSFORMATION

New Era Start ! Now !

1G



1980s

Analog Voice

Human-to-human
Early Mobile Phones

2G



1990s

Digital Voice

Low-Speed Data
Voice and Some Text

3G



2000s

Mobile Broadband

High-Speed Data
Internet Access

4G



2010s

**Faster/Better 3G/
IP-Based Network**

High-Speed Data
Internet Access

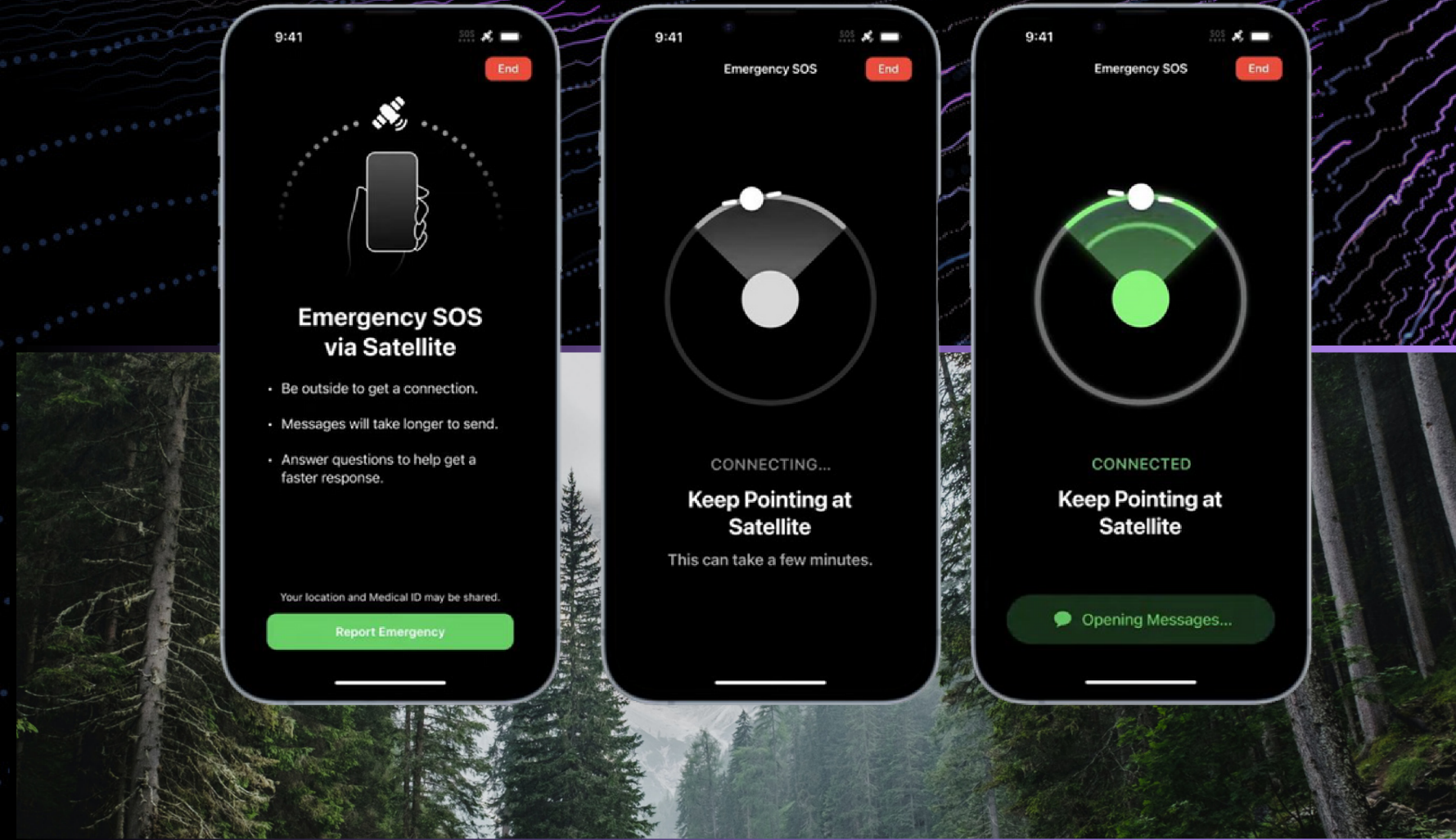
5G



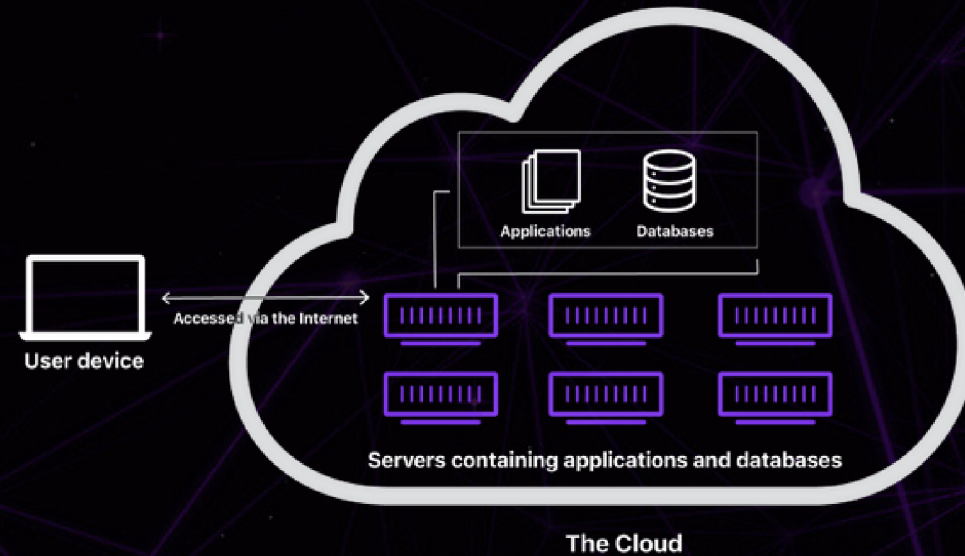
2020s

**Interconnected
Devices, Sensors, and
Systems**

For Consumers, Governments, and
Businesses



CLOUD ?



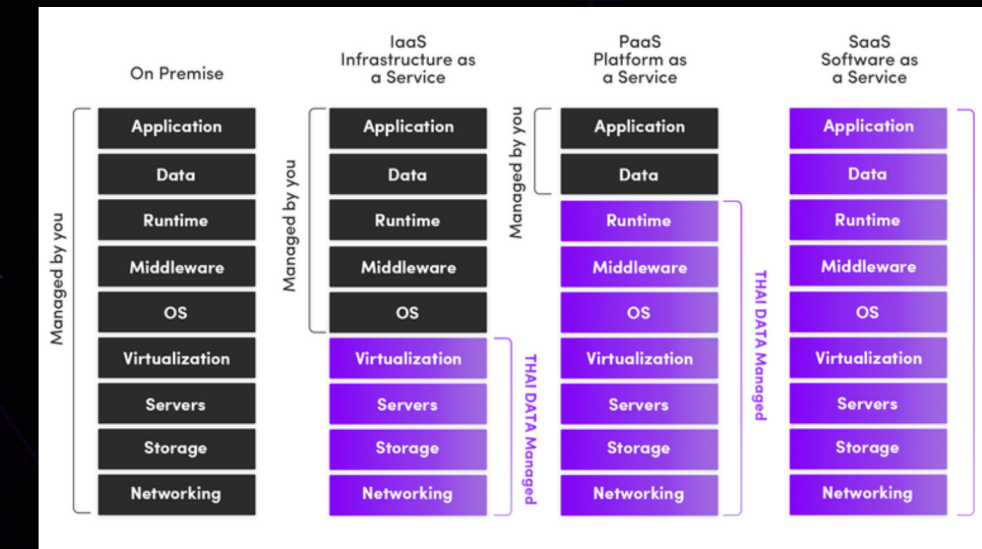
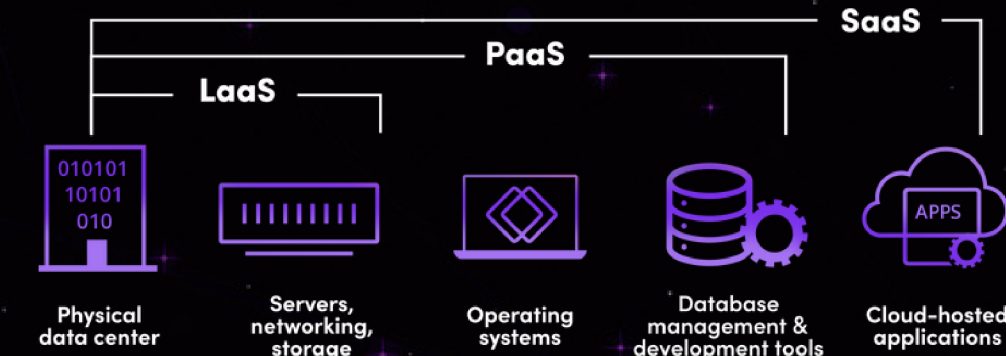
Concept

Redundant

Anytime Anywhere

Vertical and Horizontal Scale

Sustainable



Software-as-a-Service (SaaS)

Platform-as-a-Service (PaaS)

Infrastructure-as-a-Service (IaaS)

Function-as-a-Service (FaaS)

Everything as a services !

LOUD COMPUTING

On-Premies vs Cloud

Deployment

Key Factors

- Installation
- Availability
- Investment
- Business Risks

Cloud



- Easy and fast
- On-demand
- Less
- Low

On-Premise



- Time-consuming
- When bought and deployed
- High
- High

Energy Savings

Key Factors

- Energy Savings
- Cost-Savings
- Scope for SMEs
- Scope for Corporates
- Maintenance Burden

Cloud



- Comes part of a package
- High
- High
- High
- Taken care of by CSP

On-Premise



- To be managed individually
- Low
- Low
- Low
- Enterprise's responsibility

CLOUD COMPUTING

On-Premies vs Local Cloud vs Global Cloud

On-Premises

9%

Software Licenses

- Customisation & Implementation
- Hardware
- IT Personnel
- Maintenance
- Training

Ongoing Costs

- Apply Fixes,Patches,Upgrade
- Downtime
- Performance tuning
- Rewrite customizations
- Rewrite integrations
- Upgrade dependent applications
- Ongoing burden on IT
- Maintain/upgrade hardware
- Maintain/upgrade network
- Maintain/upgrade security
- Maintain/upgrade database

Cloud-Computing

68%

Subscription Fee

Implementation,Customisation & Training

Ongoing Costs

- Subscription fee

CLOUD COMPUTING

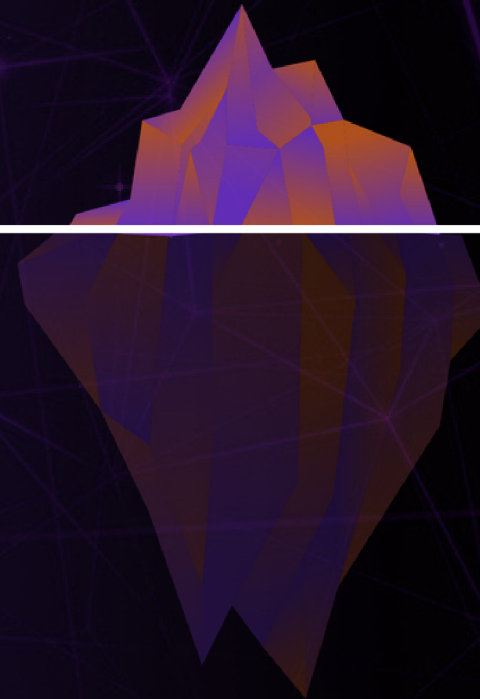
On-Premies vs Local Cloud vs Global Cloud

CLOUD LOWERS TOTAL COST OF OWNERSHIP

On-Premises

9%

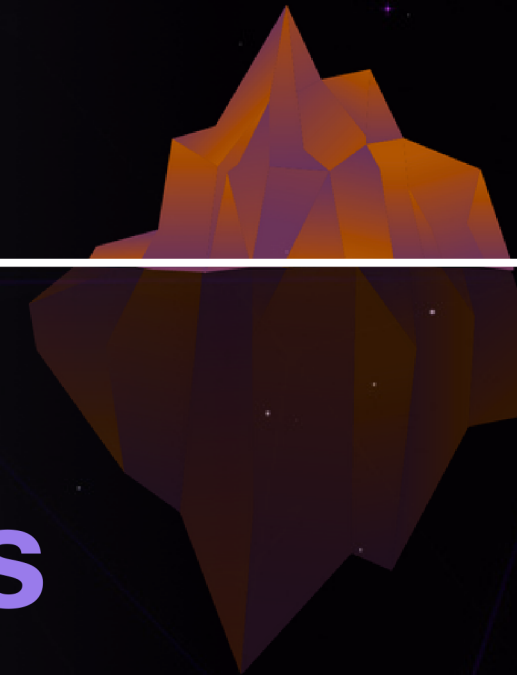
Software Licenses



Cloud-Computing

68%

Subscription Fee



77% less

LOUD INFRASTRUCTURE Model

Private Cloud

Public Cloud

Hybrid Cloud

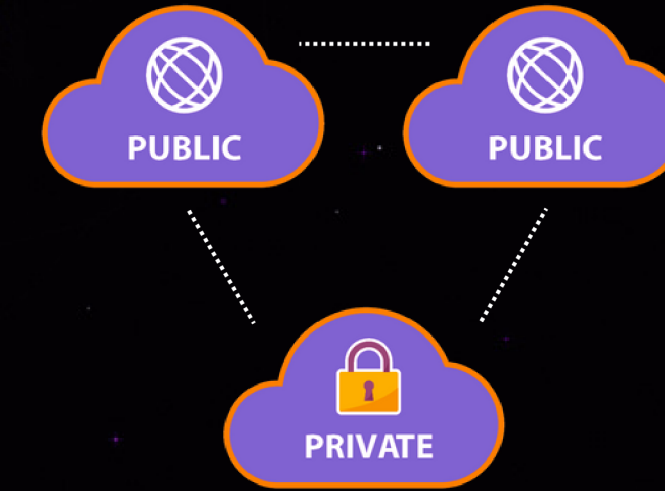
Multi-cloud



Multicloud



Hybrid Cloud






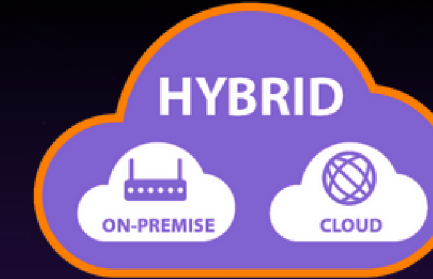
Multi/Hybrid Cloud

LOUD INFRASTRUCTURE Model








PUBLIC CLOUD

-  Services are owned and operated by cloud provider (no CAPEX, no ongoing maintenance costs).
-  Cloud providers have data centres located at different regions across the world (high redundancy, close to customers).
-  Provision of resources in minutes and usage on as need basis (highly scale).
-  Lesser security as the platform is shared.
-  Lesser flexibility and control over cloud environment.








HYBRID CLOUD

-  Businesses can keep data which needs to be secured by their standards in their on-premise environment.
-  Greater flexibility and more deployment options.
-  Extend on-premise infrastructure to the cloud without making further capital investments.
-  Network complexities and potential compliance issues
-  Can be very expensive.



PRIVATE CLOUD

-  Business has complete control over the environment.
-  Business can implement its own security protocols at every layer.
-  Data is held in environment that is in complete control by business.
-  Purchase and maintenance have to be bared by business.
-  More expensive than public cloud.

Why Alibaba Cloud ?

No.1

in China

According to IDC, Alibaba Cloud is solidly positioned as the No. 1 cloud computing service provider in China.

Source : IDC China Public Cloud Services Tracker, 2019 Q3

No.1

in Asia Pacific

According to Gartner, Alibaba Cloud ranks 1 st among cloud service providers in Asia Pacific, with 19.6% market share.

Source : Gartner Market Share : IT Services, Worldwide, 2019, 13 April 2020

No.3

in the World

According to Gartner, Alibaba Cloud ranks 3rd among cloud service providers in terms of market share in the world, being a leader among providers in emerging markets.

Source : Gartner Market Share : IT Services , Worldwide, 2019, 13 April 2020

DATA CENTERS AROUND THE WORLD



200+ Services in more than 200 countries and regions	No. 1 The No. 1 cloud service provider in China, with a 42.4 % market share
30 Regions	970 PB of data was processed during 2019's Double 11
544,000/sec 544,000 transactions per second during peak time on 11.11. 2019	1 Million More than one million paying customers
3,200+ More than 3,200 CDN nodes globally	No. 3 Ranked third in terms of global IaaS market share
10,000 Alibaba Cloud ECS can create ten thousands instances in eight minutes	89 Zones
No. 1 The No. 1 Cloud Service Provider in Asia Pacific	70+ obtained 70+ security accreditations

Singapore Availability Zone: 3 Released in 2015	Australia (Sydney) Availability Zone: 2 Released in 2016	Thailand (Bangkok) Availability Zone: 1 Released in 2022	Malaysia (Kuala Lumpur) Availability Zone: 2 Released in 2017	Indonesia (Jakarta) Availability Zone: 3 Released in 2018
Philippines (Manila) Availability Zone: 1 Released in 2021	India (Mumbai) Availability Zone: 2 Released in 2018	Japan (Tokyo) Availability Zone: 3 Released in 2016	South Korea (Seoul) Availability Zone: 1 Released in 2022	US (Virginia) Availability Zone: 2 Released in 2015
US (Silicon Valley) Availability Zone: 2 Released in 2014	Germany (Frankfurt) Availability Zone: 3 Released in 2016	UK (London) Availability Zone: 2 Released in 2018	UAE (Dubai) Availability Zone: 1 Released in 2016	SAU (Riyadh - Partner Region) Availability Zone: 2 Released in 2022
China (Hong Kong) Availability Zone: 3 Released in 2014	China (Qingdao) Availability Zone: 2 Released in 2012	China (Beijing) Availability Zone: 12 Released in 2013	China (Zhangjiakou) Availability Zone: 3 Released in 2014	China (Hohhot) Availability Zone: 2 Released in 2017
China (Ulanqab) Availability Zone: 3 Released in 2020	China (Hangzhou) Availability Zone: 8 Released in 2011	China (Shanghai) Availability Zone: 11 Released in 2015	China (Nanjing - Local Region) Availability Zone: 1 Released in 2021	China (Shenzhen) Availability Zone: 6 Released in 2014
China (Heyuan) Availability Zone: 2 Released in 2020	China (Guangzhou) Availability Zone: 2 Released in 2020	China (Chengdu) Availability Zone: 2 Released in 2020	China (Fuzhou - Local Region) Availability Zone: 1 Released in 2022	China (Wuhan - Local Region) Availability Zone: 1 Released in 2023

Alibaba Cloud offers an expanding network of CDN nodes and deployment regions, including the first public cloud data center regions in the Middle East (Dubai) and Indonesia, a string of strategic data centers in Asia, and a strong presence in North America, Europe, and Australia.

Data center regions in China offer BGP backbone network lines providing high-quality coverage country-wide to ensure stable and fast access inside the Mainland. In general, we recommend customers to select the data center closest to their end-users to further speed up online access.

NETWORK NODES

3200+
Nodes

70+
Countries

6
Continents
















900+
Distribution of International Nodes

2300+
Distribution of Nodes in China

ATTESTATIONS & CERTIFICATIONS












GLOBAL

Alibaba Cloud adheres to international information security standards and is committed to using international best practices.

 CSA STAR CSA Three-tiered Cloud Security Assurance Program	 ISO 27001 Information Security Management Standard	 ISO 20000 Information Technology Service Management Standard
 ISO 22301 Business Continuity Management Standard	 ISO 9001 Quality Management Systems Standard	 ISO 27017 Code of Practice for Cloud-Specific Information Security Controls
 ISO 27018 Code of Practice for Protecting Personal Data in the Cloud	 ISO 27701 Extension to ISO 27001 for Privacy Information Management	 ISO 29151 Code of Personally Identifiable Information Protection
 BS 10012 Personal Information Management System	 PCI DSS Payment Card Data Industry Data Security Standards v3.2.1	 PCI 3DS PCI 3DS Core Security Standard supports 3DS transaction security
 SOC1 Type II Report Internal Controls Over Financial Reporting	 SOC2 Type II Report Internal Controls Relevant to Security, Availability, and Confidentiality	 SOC3 Report General Use Report Relevant to Security, Availability, and Confidentiality









INDUSTRY

Alibaba Cloud adheres to all the domestic information security standards of the countries and regions where our cloud services are deployed.

 GxP US US FDA Regulation on ERES Part 11 of Title 21 CFR	 TISAX DE Trusted Information Security Assessment Exchange	 HIPAA/HITECH US Health Insurance Portability and Accountability Act
 MPA US Motion Picture Association Guidelines	 SEC Rule-17a US Securities and Exchange Commission (SEC) Rule 17a	 OSPAR SG Outsourced Service Provider's Audit Report (OSPAR) in Singapore
 FERPA & HECVAT US Family Educational Rights and Privacy Act	 COPPA US Children's Online Privacy Protection Rule	 DPP - Broadcast UK DPP Committed to Security Programme for Broadcast
 DPP - Production UK DPP Committed to Security Programme for Production	 FISC JP Center for Financial Industry Information Systems	

DATA PROTECTION & PRIVACY

Alibaba Cloud has completed independent cyber risk assessments to valid Alibaba Cloud's security posture. Customers can leverage Alibaba Cloud' third party cyber risk assessment report to reduce their supplier due-diligence burden.

 <p>GDPR EU General Data Protection Regulation</p>	 <p>EU Cloud CoC EU Verification-ID: 2020LVL02SCOPE013</p>	 <p>PDPA SG Personal Data Protection Act in Singapore</p>	 <p>PDPO HK The Personal Data (Privacy) Ordinance in Hong Kong</p>
 <p>PDPA MY Personal Data Protection Act in Malaysia</p>	 <p>DPTM SG Data Protection Trustmark in Singapore</p>	 <p>APEC CBPR SG APEC Cross Border Privacy Rules System (Singapore)</p>	 <p>APEC PRP SG APEC Privacy Recognition for Processors System (Singapore)</p>

Cloud Services ?

ALIBABA CLOUD PRODUCT PORTFOLIO

250+
Products

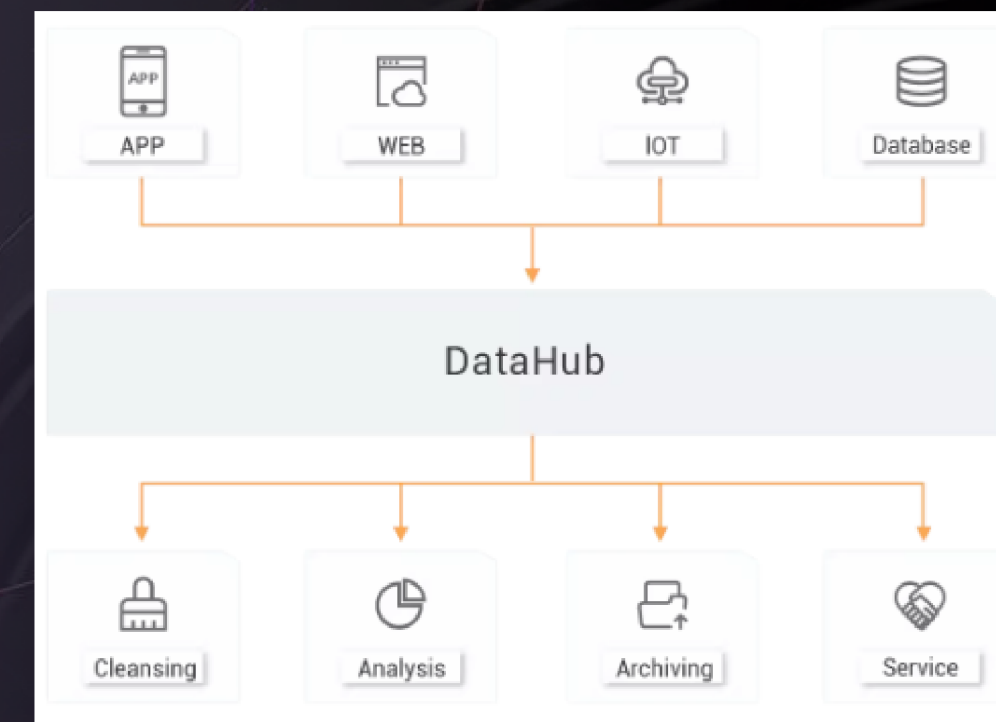
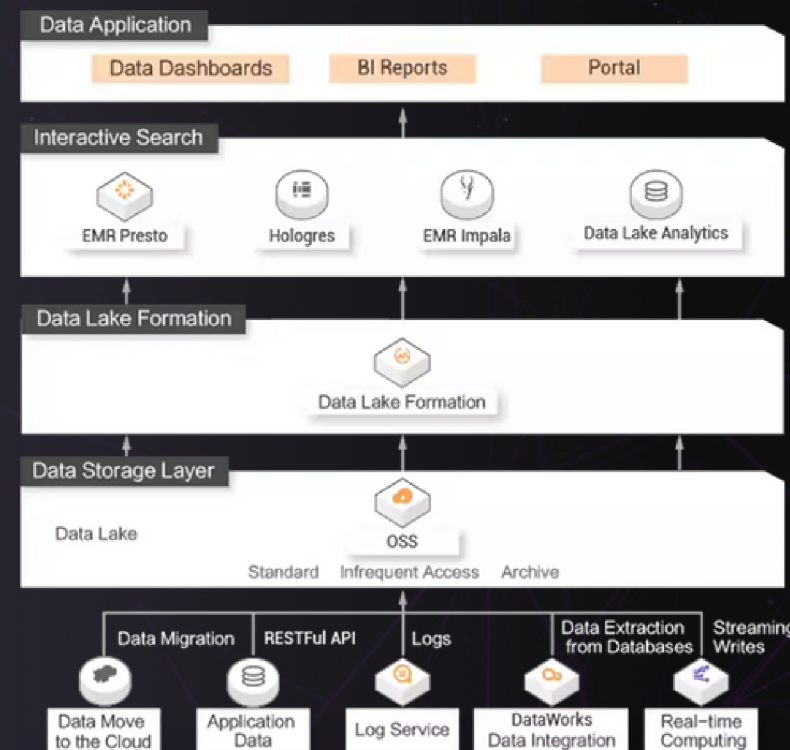
500
Solution

10k
Partner in international markets

Core Internet Technology	Middleware		Video and traffic		IOT		Application service		Security	
	MQ – Rocket MQ		Video on Demand		IoT Wireless Connect		Domains		Security Management (Managed Security Service)	
	MQ – MQTT		Apsara Live Video				Alibaba Mail			
	Application Real Time Monitor		Media Transcode Service		IoT Platform		Web Hosting		Application Security (WAF/CA/ Content Moderation/ Website Threat Inspector)	
	EDAS		CDN		IoV Command Center		API Gateway			
	Web +		Short message Service							
Data Intelligence	Database				Big Data & AI				Data Security (KMS/SSL Certificate)	
	RDS for MySQL	Redis	POLAR DB for MySQL		DataWorks	MaxCompute / PAI		Network Security (Anti-DDos/Game Shield/Cloud Firewall)		
	RDS for SQL Server	MangoDB	POLAR DB for Postgre		E-Map Reduce	Telsa / DataHub				
	RDS for PostgreSQL	Data transfer service	Analytic DB for MySQL		Data V	Quick BI		Server Security (Server-Guard / Security Center)		
	RDS for PPAS	Data mgmt. Service	Analytic DB for Postgre		Elastic Search	Open Search		Business Security (IDaaS / Cyber Security Law Consulting)		
	RDS for Maria	ADAM	Hi-Time series DB		NLP / ASR	Image Search				
Cloud Infrastructures	Elastic Compute		Innovation Compute		Storage		Network		Private Cloud	
	ECS		E-HPC		Object Storage Service		Virtual Private Cloud		Apsara Stack Enterprise	
	Auto Scaling		Bare metal instance		Block Storage		Express Connect		Apsara Stack Agility	
	Reserved Instance		Function Compute		File Storage		NAT Gateway		Apsara Stack Agility with Zstack	
	▪ Container Service for Kubernetes ▪ Elastic Container Instance ▪ Container Registry		GPU instance		Cloud Storage Gateway		Server Load Balance		Data Center as Service	
			FPGA instance		Hybrid Backup Recovery		VPN Gateway			
			Super Compute Cloud		Table Store		Shared Traffic Package			
							Shared Bandwidth			

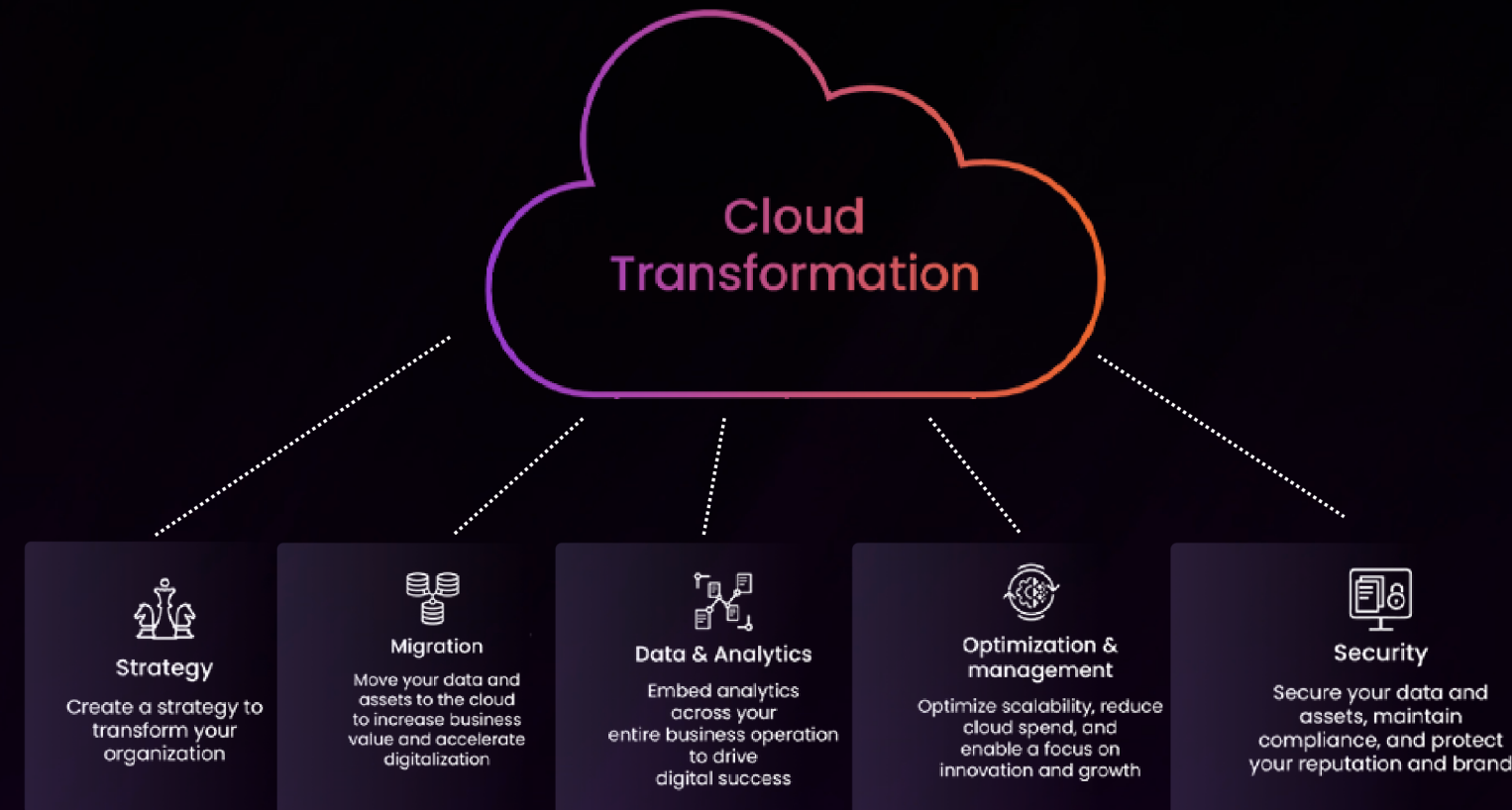
DATA LAKE & QUICK BI

A Key Component of the Cloud-Native Data Lake Framework



CLOUD TRANSFORMATION

From Strategy to Execution



Key Drivers Behind Cloud Transformation



Capital Cost Reduction



Added Value



Improved Business Agility

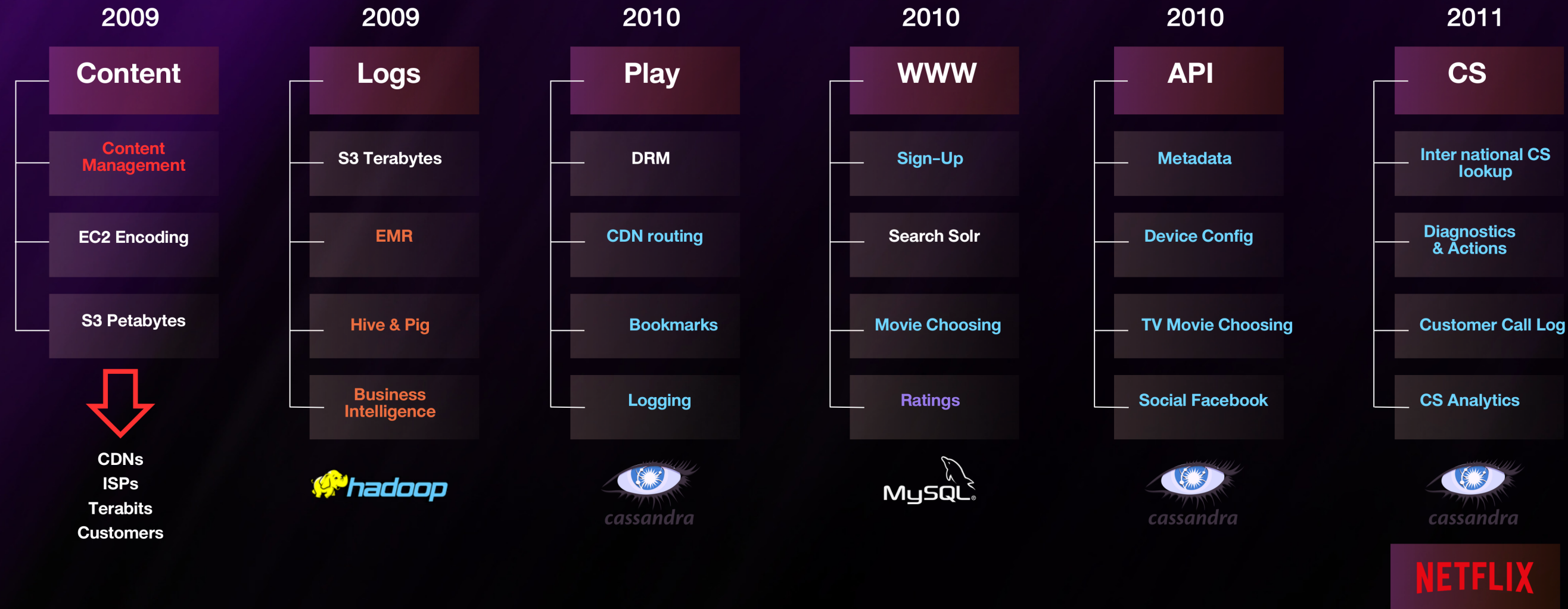


Improve Collaboration Among Teams

How powerful of cloud services

NETFLIX

NETFLIX DEPLOYED





InterContinental Hotels Group

5,400

hotels

100

million enrolled members.

810,000

guest rooms 100 countries

375,000

people work across the world

1,800

hotels its development pipeline.

Featured Products

Elastic Compute Service

Secure, scalable, high-performing virtual servers

Cloud Enterprise Network

Create your own enterprise class global network

Security Center

Security Center provides round the clock security and protection

ApsaraDB RDS for MySQL

Based on AliSQL to provide excellent stability and performance

Smart Access Gateway

BConnect enterprise networks to Alibaba Cloud



airasia

165

Destinations

25

Countries

Featured Products

Web Application Firewall

A cloud fierwall service utilizing big data capabilities to protect against web-based attacks

Anti-DDos Pro

Anti-DDoS Pro is a value-added service to protect your onnline business

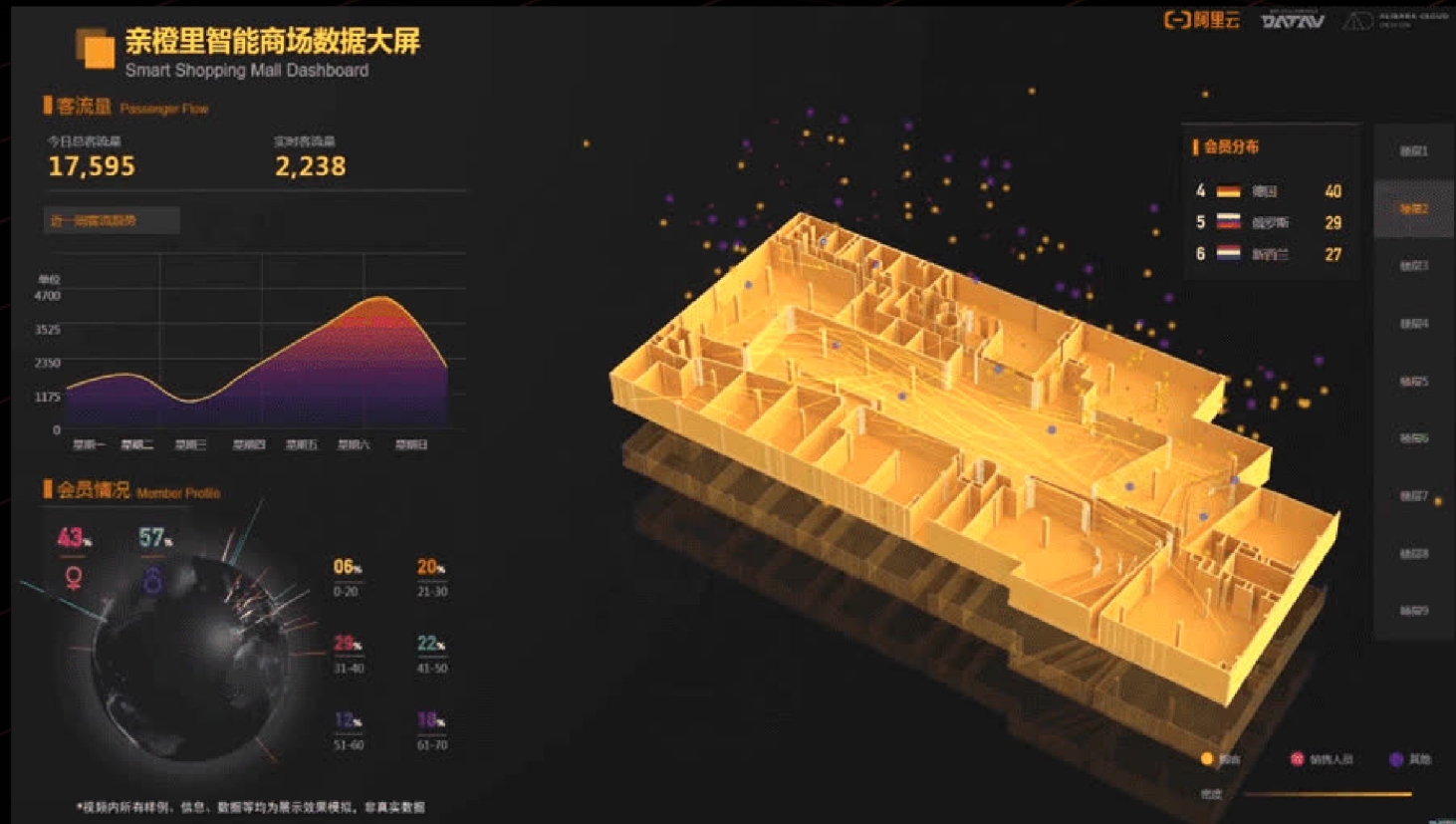
DATA V

Understand relationships, patterns, and trends. > data-driven > well-organized



DATA V

Understand relationships, patterns, and trends. > data-driven > well-organized



QIN CHENG LI SMART SHOPPING MALL

Total number of visitors

Number of visitors on each floor

Proportions of male and female visitors number of vehicles

Sales of each store

Environment data.

DATA V

Understand relationships, patterns, and trends. > data-driven > well-organized

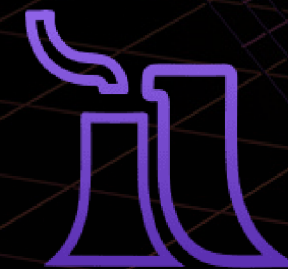
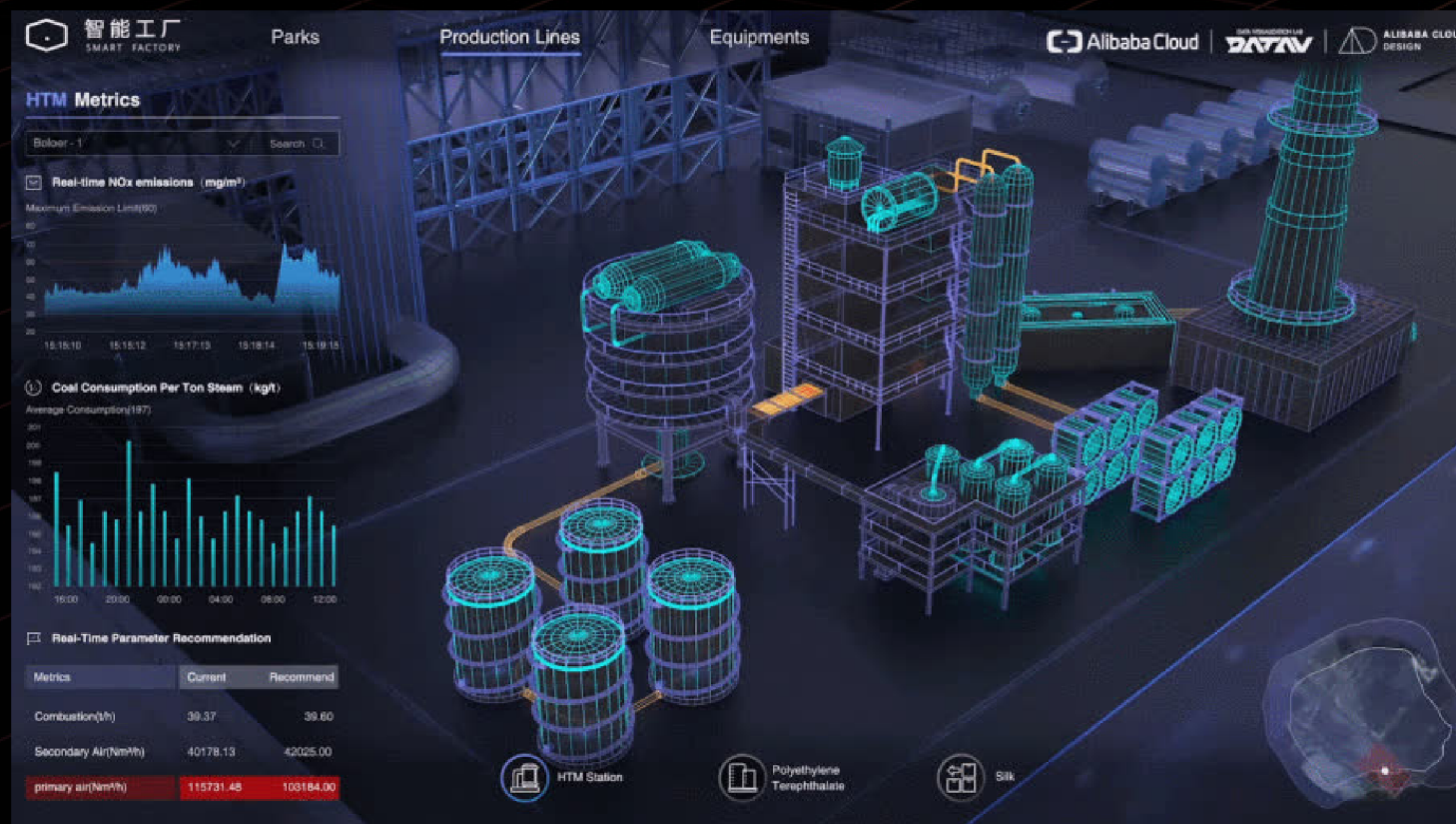


HONG KONG AIRPORT

This DataV visualization project shows people flows in the terminals and traffic on the tarmac at the airport in real time

DATA V

Understand relationships, patterns, and trends. > data-driven > well-organized

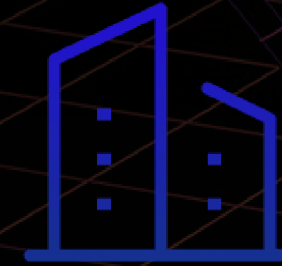
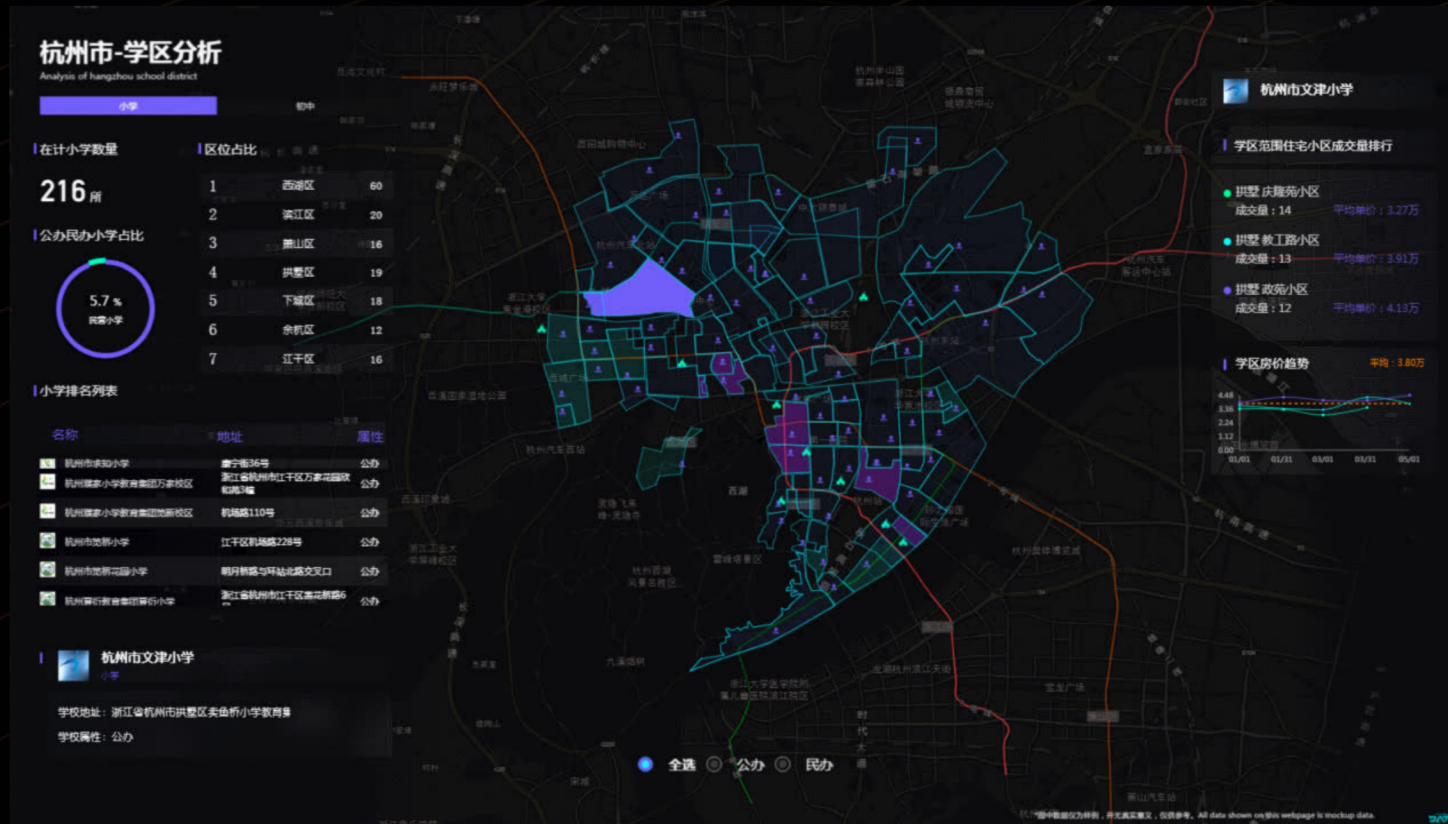


SMART FACTORY

full representation of the production parameters in each phase of a smart factory. The system also collects work data of each production line or workshop to a centralized control center to implement production control.

DATA V

Understand relationships, patterns, and trends. > data-driven > well-organized



ANALYSIS OF SCHOOL DISTRICTS IN HANGZHOU

The rankings and number of schools in each district of Hangzhou based on the distribution of primary and secondary schools. Displays the prices and sales volumes of real estate assets of each school district. The project presents the data in a clear and graphical manner.