1. Alibaba Economy Expedites Technological Advancements

2. How Technology Supports Our Existing Business Growth

3. Technology Will Define Our Future and Reshape Business Boundaries

4. Alibaba Technology’s Core Beliefs
1. Alibaba Economy Expedites Technological Advancements
Unparalleled Scale for Enterprise-level Applications

USD 547 billion
GMV*

454 million / 507 million
Annual active buyers* / Mobile MAUs**

EB level Data

Notes: GMV, annual active buyer and MAU data are from our China Retail Marketplaces. * For the twelve months ended March 31, 2017. **For the month ended March 31, 2017.
2016 11.11 Global Shopping Festival - New Record Secured by Technology

175 thousand Transactions/second at peak

657 millions Delivery orders

235 Countries and regions
Alibaba is Built on Data

20 Million HD Movies
Data processing volume per day

8.27 Billion
Daily internal data access calls at peak
Optimizing Cost, Stability, Performance and Efficiency
Robust Multi-tier Architecture Driving Tremendous Business Innovation
Rapid Business Integration

Rebuilt Lazada’s seller platform within 3 months.
Over 10 million Taobao products listed on Lazada.

Multi-tier Architecture Accelerates Business Innovation

Demand Response Time 59%
New Business Incubation Cycles 75%
2. How Technology Supports Our Existing Business Growth
Technology Cultivated Solutions Targeting Business Needs

- Personalization
- Search
- Security
- Customer Service
- Computing Scale
- User Experience
- Business Collaboration
- User Experience
- Computing Scale
- Customer Service
- Security
- Search
- Personalization
Personalization Technology

507 million Mobile MAUs*
+1 Billion Listings

Recommendation  Search  Marketing  Merchants

* For the month ended March 31, 2017; in a given month, the number of unique mobile devices that were used to visit or access certain of our mobile applications at least once during that month.
AI for Online Marketing

- Machine Learning
- Deep Learning
- Real Time
Big Data Enabled Risk Management & Security

**Risk Management**
- 30 billion protective scans per day
- Remote personal authentication system for thousands of merchants based on biometric identification

**Intrusion Prevention**
- Trillions of data are processed every day
- Minute-level detection of invasive events and prevention, hour-level tracing capabilities

**DDoS**
- Hundreds of Gbps DDoS attacks defending capabilities and backup & disaster recovery within seconds
- Successfully defended against the world's largest DDoS attack that lasted for 14 hours at peak volume of 453.8 Gbps
AI Powered Customer Service

- Chatbot named “Store Concierge”
- Used by 100,000 merchants to deal with millions of customer inquiries

GMV (USD)

<table>
<thead>
<tr>
<th>Year</th>
<th>GMV (USD)</th>
<th># of Service Calls</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>9.3 billion</td>
<td>54 thousand</td>
</tr>
<tr>
<td>2016</td>
<td>17.8 billion</td>
<td>175 thousand</td>
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11.11 Global Shopping Festival

Core Technology

- Knowledge Graph
- Context Dialogue
- Intention Identification
- Speech Recognition
- Personalized Recommendation
- Data Mining
- Semantic Comprehension
- Deep Learning

Data Mining

- Personalized Recommendation
- Context Dialogue
- Intention Identification
- Speech Recognition

Knowledge Graph

- Deep Learning
- Semantic Comprehension
- Intention Identification
- Speech Recognition

11.11 Global Shopping Festival
Infrastructure for Alibaba Cloud

Green IDC

Heterogeneous Computing

Independently Developed Network OS

AliRack: Rack Scale Solution
Alibaba Economy Is A World-leading Use Case for AI
3. Technology Will Define Our Future and Reshape Business Boundaries
Deep Learning Framework

- Very Large Scale (50 billion parameters)
- Online Learning (real time)
- Optimized for Reinforcement Learning
Speech Technology

- Intelligent Monitoring and Analysis of Call-Center Audio Recordings
- Court Trial Transcription
- Voice Interaction System for Internet Car
Voice-Controlled Intelligent Platform

Home  Hotel  Education  Entertainment
Global winner of the ICDAR robust reading competition

Identify malicious ads and detect illegal products

Semantic search based on cross-media retrieval

Fully implemented on Taobao App

Image Search
- Offline index and online query for billions of photos
- Pailitao’s UV over 10m per day

OCR (Optical Character Recognition)
- Global winner of the ICDAR robust reading competition
- Identify malicious ads and detect illegal products

Image Understanding
- Semantic search based on cross-media retrieval
- Fully implemented on Taobao App
Video Technology

- End-to-End Deep Neural Network
- Comprehensive Analysis and Understanding of Voice, Audio, OCR and other Multi-modality Signals
- Record Holder for Kitti Vision Benchmark Suite Competition (90.46%)
IoT Cloud-based Integration Services

- **Alink**
  - The Largest Household Appliance IoT Platform in China

- **ID²**
  - First ITU-T Standard for IoT Device Identity

- **400+**
  - Partner Brands

(Source: Alibaba)

Intelligent Industry

Intelligent City

Intelligent Life
Electronic Shelf Label (ESL) - New Retail Infrastructure

Synchronize online and offline data
capture and digitize offline user behavior
4. Alibaba Technology's Core Beliefs
THANKS