Alibaba and Lessons from China's innovative digital giant

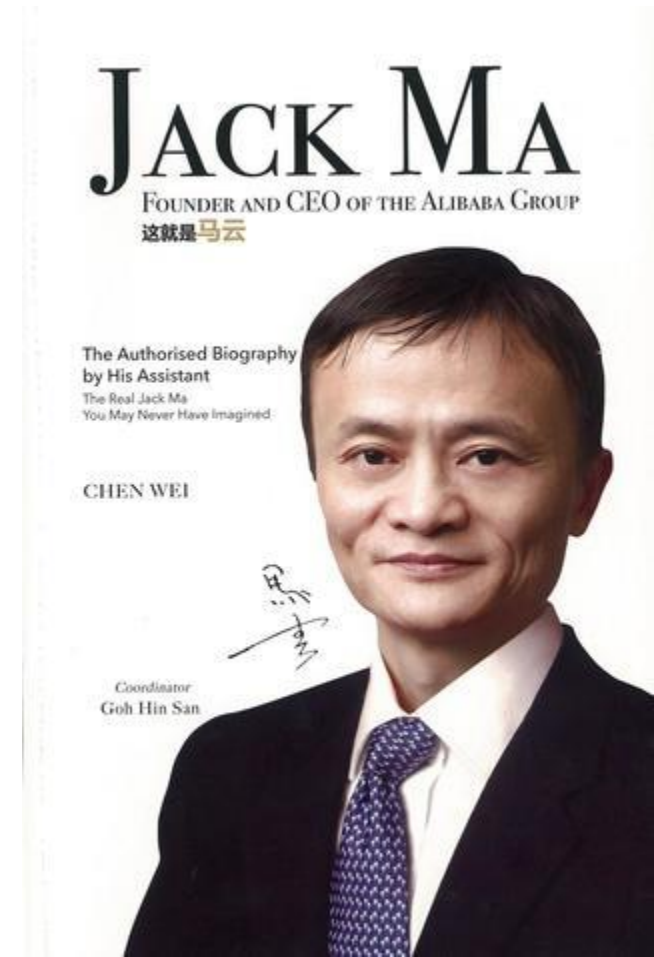**Alibaba Group**
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Alibaba

- Alibaba hit the headlines with the world's biggest IPO in September 2014.

- The company has a market cap among the global top 10, has surpassed Walmart in global sales.

- Founder Jack Ma.

Alibaba

- From its inception, in 1999, Alibaba experienced great growth on its e-commerce platform.

- Team of Alibaba had agreed on a vision. We would "**foster the development of an open, coordinated, prosperous e-commerce ecosystem**." That's when Alibaba's journey really began.

- Alibaba's special innovation, we realized, was that we were truly building an ecosystem.

Ecosystem

- A community of organisms (**businesses and consumers of many types**) interacting with one another and the environment (**the online platform and the larger off-line physical elements**).

- Our strategic imperative was to make sure that the platform **provided all the resources**, or **access to the resources**, that an online **business would need to succeed**, and hence supported the evolution of the ecosystem.

Ecosystem

- The ecosystem we built was simple at first: We linked buyers and sellers of goods.

- As technology advanced, more business functions moved online—including established ones, such as advertising, marketing, logistics, and finance, and emerging ones, such as affiliate marketing, product recommenders, and social media influencers.

Alibaba

- Alibaba today is not just an online commerce company.

- It is what you get if you take all functions associated with retail and coordinate them online into a sprawling, data-driven network of sellers, marketers, service providers, logistics companies, and manufacturers.

- In other words, Alibaba does what **Amazon**, **eBay, PayPal, Google, FedEx, wholesalers**, and a good portion of manufacturers do in the United States, with a healthy helping of financial services.

Internet Companies

- Of the world's 10 most highly valued companies today, seven are internet companies with business models similar to ours.

- Five of them—Amazon, Google, and Facebook in the United States and Alibaba and Tencent in China—have been around barely 20 years.

- Because of new capabilities in **network coordination** and **data intelligence.**

- These firms follow an approach I call **smart business**.

Smart Business

- Smart business emerges when all players involved in achieving a common business goal—retailing, for example, or ride sharing—are **coordinated in an online network and use machine-learning technology to efficiently leverage data in real time**.

- **This tech-enabled model, in which most operational decisions are made by machines**, allows companies to adapt dynamically and rapidly to changing market conditions and customer preferences, gaining tremendous competitive advantage over traditional businesses.

Smart Business

- Ample computing power and digital data are the fuel for machine learning.

- The more data and the more iterations the algorithmic engine goes through, the better its output gets.

- Data scientists come up with probabilistic prediction models.

Ant Microloans

- The minimum loan amount—about 6 million RMB or just under $1 million—was well above the amounts needed by most small and medium-size enterprises (SMEs).

- Banks were reluctant to service companies that lacked any kind of credit history or even adequate documentation of their business activities.

Ant Microloans

- Today, Ant can easily process loans as small as several hundred RMB (around $50) in a few minutes.

- How is this possible? When faced with potential borrowers, lending institutions need answer only three basic questions: Should we lend to them, how much should we lend, and at what interest rate?

- Once sellers on our platforms gave us authorization to analyze their data, we were well positioned to answer those questions.

Ant Microloans

- Our algorithms can look at transaction data to assess how well a business is doing, how competitive its offerings are in the market, whether its partners have high credit ratings, and so on.

- Ant uses that data to calculate credit scores. At Ant the analysis is done automatically on all borrowers and on all their behavioral data in real time.

- Every transaction, every communication between seller and buyer, every connection with other services available at Alibaba, indeed every action taken on our platform, affects a business's credit score.

Ant Microloans

- Determining how much to lend and how much interest to charge requires analysis of many types of data generated inside the Alibaba network, such as **gross profit margins and inventory turnover**, along with less mathematically precise information such as product life cycles and the quality of a seller's social and business relationships.

- The algorithms might, for example, analyze the frequency, length, and type of communications (instant messaging, e-mail, or other methods common in China) to assess relationship quality.

Ant Microloans

- As the recalibrated algorithms, based on feedback, produce increasingly accurate predictions, Ant's risk and costs steadily decrease, and borrowers get the money they need, when they need it, at an interest rate they can afford.

- The result is a highly successful business: The microlending operation has a default rate of about 1%, far below the World Bank's 2016 estimate of an average of 4% worldwide.

Automate

- To become a smart business, your firm must enable as many operating decisions as possible to be made by machines fueled by live data.

- Transforming decision making in this way is a four-step process.
  - Step 1: "Datafy" every customer exchange.
  - Step 2: "Software" every activity.
  - Step 3: Get data flowing.
  - Step 4: Apply the algorithms.

"Datafy" every customer exchange

- Ant was fortunate to have access to plenty of data on potential borrowers to answer the questions inherent in its lending business.

- For many businesses, the data capture process will be more challenging. But live data is essential to creating the feedback loops that are the basis of machine learning.

"Datafy" every customer exchange

- Renting a bike traditionally involved going to a rental location, leaving a deposit, having someone give you a bike, using the bike, returning it, and then paying for the rental by cash or credit card.

- Several rival Chinese companies put all of this online by integrating various new technologies with existing ones.

- A crucial innovation was the combination of QR codes and electronic locks that cleverly automated the checkout process.

"Datafy" every customer exchange

- By opening the bike-sharing app, a rider can see available bicycles and reserve one nearby. Once the rider arrives at the bicycle, he or she uses the app to scan a QR code on the bicycle.

- Assuming that the person has money in his or her account and meets the rental criteria, the QR code will open the electronic bike lock. The app can even verify the person's credit history through Sesame Credit, Ant Financial's new online product for consumer credit ratings, allowing the rider to skip paying a deposit, further expediting the process.

- When the bike is returned, closing the lock completes the transaction. The process is simple, intuitive, and usually takes only several seconds.

"Software" every activity

- In a smart business, all activities—not just knowledge management and customer relations—are configured using software so that decisions affecting them can be automated.

- The first step is to build a model of how humans currently make decisions and find ways to replicate the simpler elements of that process using software.

"Software" every activity

- The growth of Taobao, the domestic retailing website of Alibaba Group, is driven by continuous softwaring of the retailing process.

- One of the first major software tools built on Taobao was an instant message tool called **Wangwang**, through which buyers and sellers can talk to each other easily.

- Alibaba also developed a set of software tools that help sellers design and launch a variety of sophisticated online shop fronts.

"Software" every activity

- **Once online shops are up and running, sellers can access other software products to issue coupons, offer discounts, run loyalty programs, and conduct other customer relationship activities**, all of which are coordinated with one another.

- Because most software today is run online as a service, an important advantage of softwaring a business activity is that live data can be collected naturally as part of the business process, building the foundation for the application of machine-learning technologies.

Get data flowing

- In ecosystems with many interconnected players, business decisions require complex coordination. Taobao's recommendation engines, for example, need to work with the inventory management systems of sellers and with the consumer-profiling systems of various social media platforms.

- Its transaction systems need to work with discount offers and loyalty programs, as well as feed into our logistics network.

Get data flowing

- Communication standards, such as TCP/IP, and application programming interfaces (APIs) are critical in getting the data flowing among multiple players while ensuring strict control of who can access and edit data throughout the ecosystem.

- APIs, a set of tools that allow different software systems to "talk" and coordinate with one another online, have been central to Taobao's development.

- As the platform grew from a forum where buyers and sellers could meet and sell goods to become China's dominant e-commerce website, merchants on the site needed more and more support from third-party developers.

Apply the algorithms

- Today, when customers log on, they see a customized webpage with a selection of products curated from the billions offered by our millions of sellers.

- The selection is generated automatically by Taobao's powerful recommendation engine.

- Its algorithms, which are designed to optimize the conversion rate of each visit, churn data generated across Taobao's platform, from operations to customer service to security.

Apply the algorithms

- Using a variety of machine-learning technologies, such as semantic comprehension, context dialogues, knowledge graphs, data mining, and deep learning, the chatbots rapidly improve their ability to diagnose and fix customer issues automatically.

- Chatbots can also make a significant contribution to a seller's top line. Apparel brand Senma, for example, started using one a year ago and found that **the bot's sales were 26 times higher than the merchant's top human sales associate**.

Alibaba by numbers

- The Alibaba Group went public in the United States in September 2014 and has grown at a blistering pace, now boasting a market cap of more than $500 billion.

- The group's e-commerce platforms now have more than 550 million annual active consumers.

- In the fiscal year ending March 2017, Alibaba Group reported profits of more than $15 billion on nearly $40 billion in revenue.

- Ant reported profits of $814 million on revenue of $8.9 billion and is currently valued at over $100 billion.

- Ant pays Alibaba royalties, which amounted to $332 million in 2017.

Leader's Role

- In my course on smart business at Hupan School of Entrepreneurship, I show a slide of 10 business leaders and ask the students to identify them. They can easily pick out Jack Ma, Elon Musk, and Steve Jobs. But virtually no one can identify the CEO of CitiGroup or Toyota or General Electric.

- Inspire!

Leader's Role

- Digital leaders no longer manage; rather, they enable workers to innovate and facilitate the core feedback loop of user responses to firm decisions and execution.

- The commercialization of cloud computing and artificial intelligence technologies has made large-scale computational power and analytic capabilities accessible to anyone.

Thank You