

# The development of E-Commerce

Lecture 2

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# Assessment

56 students will be randomly divided into 14 groups by programming.

	Regular homework assessments	Group presentation	Final assessment	Final score
Score	100	100	100	$0.1 * \text{Regular home work assessments} + 0.3 * \text{Group presentation} + 0.6 * \text{Final assessment}$

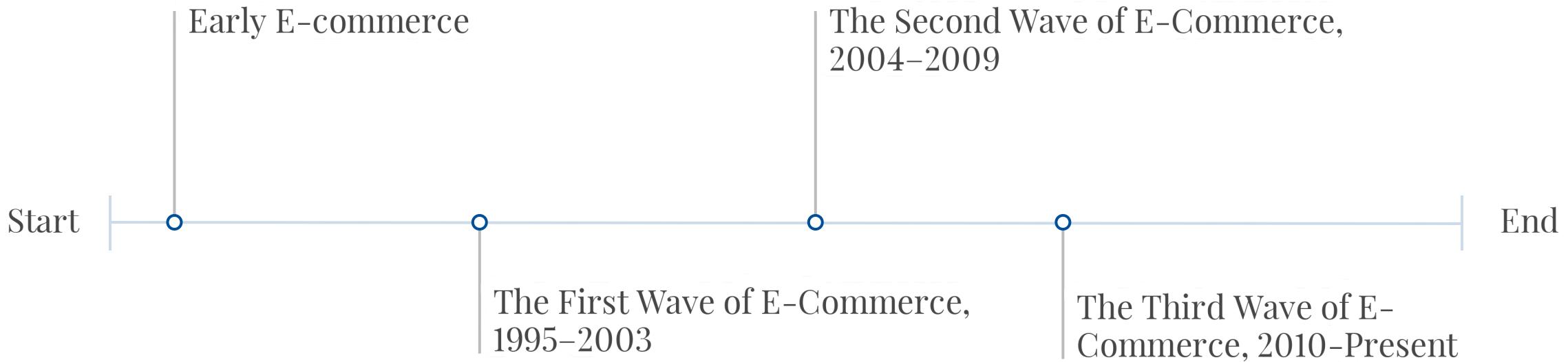


Section 1

# The development of E-commerce

# The three waves of E-commerce

Over the thousands of years that people have engaged in commerce with one another, they have adopted the tools and technologies that became available. For example, the advent of sailing ships in ancient times opened new avenues of trade to buyers and sellers. Later innovations, such as the printing press, steam engine, and telephone, have changed the way people conduct commerce activities. The Internet has changed the way people buy, sell, hire, and organize business activities in more ways and more rapidly than any other technology in the history of business.



# Early E-commerce

Although the Web has made online shopping possible for many businesses and individuals, in a broader sense, electronic commerce has existed for many years. Since the mid-1960s, banks have been using electronic funds transfers (EFTs, also called wire transfers (电汇)), which are **electronic transmissions of account exchange information over private communications networks**. Initially used to transfer money between business checking accounts, the use of EFTs gradually expanded to include payroll deposits to employees' accounts, automatic payment of auto and mortgage loans, and deposit of government payments to individuals, such as U.S. Social Security System remittances.

Businesses have also used a form of E-commerce, known as electronic data interchange (EDI) , for many years. **EDI occurs when one business transmits computer-readable data in a standard format to another business**. In the 1960s, businesses realized that many of the documents they exchanged were related to the shipping of goods; for example, **invoices, purchase orders**, and bills of lading. **These documents included the same set of information for almost every transaction**. Businesses also realized that they were spending a good deal of time and money entering this data into their computers, printing paper forms, and then reentering the data on the other side of the transaction. Although the purchase order, invoice, and bill of lading for each transaction contained much of the same information—such as item numbers, descriptions, prices, and quantities—**each paper form usually had its own unique format for presenting the information**. By creating a set of standard formats for transmitting the information electronically, businesses were able to reduce errors, avoid printing and mailing costs, and eliminate the need to reenter the data.

# Early E-commerce

Businesses that engage in EDI with each other are called trading partners. The standard formats used in EDI contain the same information that businesses have always included in their standard paper invoices, purchase orders, and shipping documents. Firms such as General Electric, Sears, and Walmart were pioneers in using EDI to improve their purchasing processes and their relationships with suppliers. The U.S. government, which is one of the largest EDI trading partners in the world, was also instrumental in bringing businesses into EDI.

One problem that EDI pioneers faced was the high cost of implementation. Until the late 1990s, doing EDI meant buying expensive computer hardware and software and then either establishing direct network connections (using leased telephone lines) to all trading partners or subscribing to a value-added network. A value-added network (VAN) is an independent firm that offers connection and transaction-forwarding services to buyers and sellers engaged in EDI. Before the Internet came into existence as we know it today, VANs provided the connections between most trading partners and were responsible for ensuring the security of the data transmitted. EDI continues to be a large portion of B2B electronic commerce and is growing steadily every year in number of transactions and dollar volume.

# The First Wave of E-Commerce, 1995–2003

The first wave of electronic commerce was characterized by its rapid growth, often called a “boom (繁荣),” which was followed by a rapid contraction, often called a “bust (萧条).” Between 1997 and 2000, more than 12,000 Internet-related businesses were started with more than \$100 billion of investors’ money. In an extended burst of optimism, and what many later described as **irrational** exuberance, investors feared that they might miss the moneymaking opportunity of a lifetime. As more investors competed for a fixed number of good ideas, the price of those ideas increased. Many good ideas suffered from poor implementation. Worse, a number of bad ideas were proposed and funded.

More than 5000 of these Internet start-up firms went out of business or were acquired in the downturn that began in 2000. The media coverage of the “dot-com bust” from 2000 to 2003 was extensive. However, during that time, more than \$200 billion was spent bailing out troubled E-commerce businesses and starting completely new online ventures. Although this injection of financial investment was not reported widely in either the general or business media, these investments set the stage for significant growth in online business activity in subsequent years. This rebirth provided another chance at success for many good online business ideas that had been poorly implemented in the early days of the Internet.

# The Second Wave of E-Commerce, 2004–2009

The first wave of electronic commerce was predominantly a U.S. phenomenon. Web pages were primarily in English, particularly on commerce sites. **The second wave was characterized by an expanding international scope, with sellers beginning to do business in other countries and languages.** Language translation and currency conversion were two impediments to rapid global expansion of E-commerce in its second wave.

In the first wave, easy access to **start-up capital** led to an overemphasis on **creating entirely new enterprises** to exploit E-commerce opportunities. Investors were excited about E-commerce and wanted to participate, no matter how much it cost or how weak the underlying ideas were. **In the second wave, established companies began using their own internal funds to finance gradual expansion of E-commerce opportunities.** These measured and **carefully considered** investments are helping E-commerce grow more steadily, though more slowly.

The Internet technologies used in the first wave, especially in B2C commerce, were slow and inexpensive. Although businesses typically had broadband connections, most consumers connected to the Internet using dial-up modems. **The increase in broadband connections in homes is a key element in the B2C component of the second wave.** In 2004, the number of U.S. homes with broadband connections began to increase rapidly. Most industry estimates showed that about 12 percent of U.S. homes had broadband connections in early 2004. By 2009, those estimates were ranging between 70 and 80 percent. Other countries, such as South Korea, began to subsidize their citizens' Internet access, which led to an even higher rate of broadband usage.

# The Second Wave of E-Commerce, 2004–2009

The increased use of home Internet connections to transfer large audio and video files is generally seen as the reason large numbers of people spent the extra money required to obtain a broadband connection during the second wave. The increased speed of broadband not only makes Internet use more efficient, but it also can alter the way people use the Web. For example, a broadband connection allows a user to watch movies and television programs online—something that is impossible to do with a dial-up connection. This opens up more opportunities for businesses to make online sales. It also changes the way that online retailers can present their products to Web site visitors. Although business customers, unlike retail customers, have had fast connections to the Internet for many years, the increasing availability of wireless Internet connections increased the volume and nature of B2B electronic commerce during the second wave. For example, salespeople using laptop computers could stay in touch with customers, prepare quotes, and check on orders being fulfilled from virtually anywhere.

Electronic mail (or e-mail) was used in the first wave as a tool for relatively unstructured communication. In the second wave, both B2C and B2B sellers began using e-mail as an integral part of their marketing and customer contact strategies.

# The Second Wave of E-Commerce, 2004–2009

Online advertising was the main intended revenue source of many failed dot-com businesses in the first wave. After a pronounced dip in online advertising activity and revenues near the end of the first wave, companies began the second wave with a renewed interest in **making the Internet work as an effective advertising medium**. Some categories of online advertising, such as employment services (job-wanted ads) have grown rapidly and have replaced traditional advertising outlets. Companies such as Google have devised ways of delivering specific ads to Internet users who are most likely to be interested in the products or services offered by those ads.

The second wave fulfilled the promise of available technology by supporting the legal **distribution of music, video, and other digital products on the Web**. Apple Computer's iTunes Web site is an example of a second-wave digital product distribution business that is meeting the needs of consumers and its industry.

Another group of technologies emerged in the second wave that made new online businesses possible. The general term for these technologies is **Web 2.0**, and they include software that allows users of Web sites to **participate in the creation, editing, and distribution of content on a Web site owned and operated by a third party**. Sites such as Wikipedia, YouTube, and Facebook use Web 2.0 technologies. Customer relationships management software that runs from the Web, such as Salesforce.com, also uses Web 2.0 technologies.

# The Third Wave of E-Commerce, 2010–Present

In 2010, a number of factors came together to start a third wave in the development of E-commerce. Some of these factors include:

- A critical mass of mobile users with powerful devices (smartphones and tablets) that, for the first time, allowed them to interact online with businesses along with the proliferation of high-speed mobile phone networks throughout the world that provide useful connections among users and companies
- An increase in electronic commerce activity, both domestic and across borders, in developing countries, especially those with large populations such as China, India, and Brazil
- Widespread participation in social networking platforms combined with businesses' increased willingness to use them for advertising, promotion, and sales
- Increased online participation by smaller businesses in sales, purchasing, and capital-raising activities
- Highly sophisticated analysis of the large amounts of data that companies collect about their online customers
- Increased integration of tracking technologies into B2B electronic commerce and the management of business processes within companies

# EMERGENCE OF MOBILE COMMERCE

Since about 2001, industry analysts have been predicting the emergence of mobile telephone-based commerce (often called mobile commerce or m-commerce) every year. And year after year, they were surprised that the expected development of mobile commerce did not occur. The limited capabilities of mobile telephones were a major impediment.

In the third wave of electronic commerce, **mobile commerce finally took off with the increasingly widespread use of mobile phones that allow Internet access and smartphones**. Smartphones are mobile phones that include a Web browser, a full keyboard, and an identifiable operating system that allows users to run various software packages. These phones are available with usage plans that include very high or even unlimited data transfers at a fixed monthly rate.

Another technological development was the introduction of tablet computers. These handheld devices are larger than a smartphone but smaller than a laptop computer. **Most tablet computers (and smartphones) can connect to the Internet through a wireless phone service carrier or a local wireless network**. This flexibility is important, especially if the wireless data plan restricts the amount of data that can be downloaded. **The availability of these devices and the low cost of Internet connectivity have made mobile commerce possible on a large scale for the first time**.

Both tablet devices and smartphones allow users to access the Internet using Web browsers; however, **an increasing number of mobile shoppers use mobile software applications (mobile apps) to make purchases on their mobile devices. Mobile apps are issued by the seller to make shopping at their store easier and more convenient**. In 2014, Internet Retailer reported that 42 percent of all B2C mobile sales in the United States were made using these apps.

# EMERGENCE OF GLOBAL E-COMMERCE

One force driving the growth in global online sales to consumers is the ever-increasing number of people who have access to the Internet. Today, billions of people around the world still do not have computers and, therefore, do not have computer access to the Internet. The increases in global online business, especially in less developed countries, are due in part to the growing numbers of people using inexpensive devices such as mobile phones and tablet devices to access the Internet. This growth is expected to be especially dramatic in highly populated countries that also have rapidly growing economies such as China, India, and Brazil. In fact, online retail sales in China have exceeded those in the United States since 2010.

# WIDESPREAD SOCIAL NETWORKING

The Web 2.0 technologies that enabled part of the growth in E-commerce that occurred in the second wave will play a major role in the third wave. For example, social networking sites such as Facebook and microblogging technologies such as Twitter can be used to engage in social commerce.

Social commerce is the use of interpersonal connections online to promote or sell goods and services. Because a handheld device connected to the Internet can put a user online virtually all the time, businesses can use online social interactions to advertise, promote, or suggest specific products or services. Although sales traceable directly to social commerce activities are estimated to be about \$20 billion per year, most industry analysts believe that the effect of these activities on overall online business is much greater.

# INCREASED PARTICIPATION BY SMALL BUSINESSES

Large businesses—both existing businesses and new businesses that had obtained large amounts of capital early on—dominated the first wave. The second wave saw a major increase in the participation of small businesses (those with fewer than 200 employees) in the online economy. Still, more than 30 percent of small businesses in the United States do not have Web sites. In other parts of the world, this percentage is much higher. **The third wave of E-commerce will include the participation of a significantly larger proportion of these smaller businesses.**

One way that smaller businesses can obtain funding for operations is by using Web sites and social commerce activities to raise capital. Web sites used to gather multiple small investors together for specific business funding activities are called **crowdsourcing sites**. These allow businesses to post their ideas and solicit funding for them from the general public, replacing banks and private investors as the source of the money they need for expansion or creating new products and services.

# SOPHISTICATED ANALYSIS OF LARGE DATASETS

Companies that do business online found that they could **track the detailed behavior of customers** as they navigate the company Web site. They also found that they could store large amounts of this information and use it to **improve their operations and interactions with customers**. The availability of so much data, which was available to physical companies only through **expensive surveys and focus groups**, was a major force in the development of sophisticated software tools for analyzing large amounts of data. The term big data is used in business to describe very large stores of information such as that collected by online sellers about their customers. The highly sophisticated tools for investigating patterns and knowledge contained in big data are called data analytics.

Companies that store large amounts of data about their customers' behavior on their Web sites can combine that information with their existing data about customers' past purchases to predict the kinds of products, services, or special offers in which each customer might be interested.

# INTEGRATION OF TRACKING TECHNOLOGIES INTO B2B

In the first two waves, Internet technologies were integrated into B2B transactions and internal business processes by using bar codes and scanners to track parts, assemblies, inventories, and production status. These tracking technologies were not well integrated. Also, companies sent transaction information to each other using a patchwork of communication methods, including fax, e-mail, and EDI. In the third wave, **Radio Frequency Identification (RFID) devices and smart cards are being combined with biometric technologies, such as fingerprint readers and retina scanners, to control more items and people in a wider variety of situations.** These technologies are increasingly integrated with each other and with communication systems that allow companies to communicate with each other and share transactions, inventory level, and customer demand information effectively.

## Summary

# Key characteristics of the first three waves of E-commerce

Electronic Commerce Characteristic	First Wave	Second Wave	Third Wave
<b>International Character of Electronic Commerce</b>	Dominated by U.S. companies	Global enterprises in many countries participating in electronic commerce	Emergence of China, India, Brazil, and other countries as major centers of electronic commerce activity
<b>Languages</b>	Most electronic commerce Web sites in English	Many electronic commerce Web sites available in multiple languages	English is no longer the dominant language on Web sites worldwide
<b>Funding</b>	Many new companies started with outside investor money	Established companies funding electronic commerce initiatives with their own capital	Wide variety of funding sources available, including crowdsourcing
<b>Connection Technologies</b>	Many electronic commerce participants used slow Internet connections	Rapidly increasing use of broadband technologies for Internet connections	High bandwidth mobile telephone networks become an additional important connection technology
<b>Contact with Customers</b>	Unstructured e-mail communication with customers	Customized e-mail strategies are integral to customer contact	Social networking tools are important additions to e-mail contact
<b>Advertising and Electronic Commerce Integration</b>	Reliance on simple forms of online advertising as main revenue source	Use of multiple sophisticated advertising approaches and better integration of electronic commerce with existing business processes and strategies	Increasingly, advertising and marketing strategies are driven by available online communication technologies
<b>Distribution of Digital Products</b>	Widespread piracy due to ineffective distribution of digital products	New approaches to the sale and distribution of digital products	Sale and distribution of digital products becomes commonplace
<b>First-Mover Advantage</b>	Rely on first-mover advantage to ensure success in all types of markets and industries	Realize that first-mover advantage leads to success only for some companies in certain specific markets and industries	First-mover advantage no longer seen as a key element in electronic commerce initiatives

# Conditions of the emerge of E-commerce

Social networking  
社会网络化

Economic  
digitization  
经济数字化

Global competition  
全球竞争化

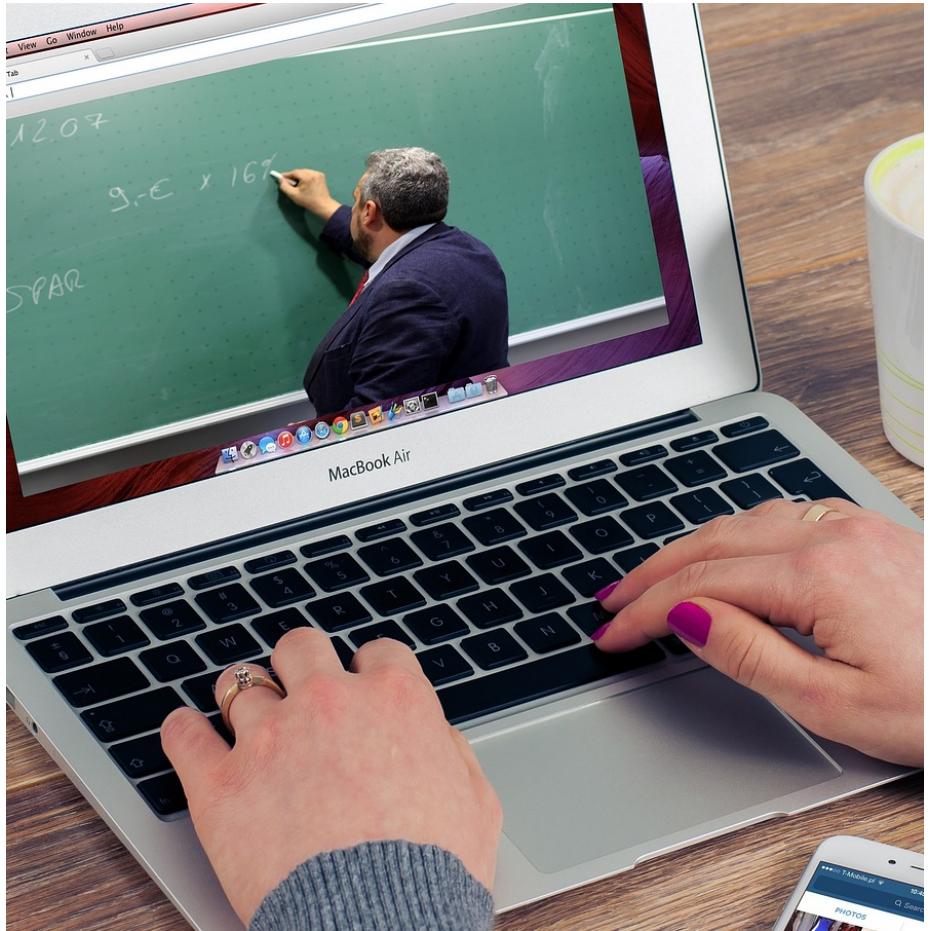
Trade  
liberalization  
贸易自由化

The development of information  
technology: Computer, network...  
计算机的广泛应用、网络的普及和成熟

The development of social  
economy  
社会经济发展使得商品供过于求

## Traditional commerce

# Industry-specific applications of E-Commerce



## Education and E-learning

Online education (e-Learning), also known as distance education or web-based education, refers to the online transmission of information for the purpose of education, training, and knowledge management. Teaching and learning are not limited by time, space, or location, allowing for flexible and diverse channels of knowledge acquisition.

- B2C online education (猿题库, 51 Talk, etc.)
- C2C online education (荔枝微课, 网易云课堂个人讲师模式)
- O2O online education
- B2B (百度、新浪、新东方教育云...)

# Industry-specific applications of E-Commerce



## Internet healthcare/e-healthcare

Internet healthcare, also known as e-health or online healthcare, refers to the provision of medical services, information, and support through digital platforms and Internet-based technologies. It encompasses a wide range of healthcare activities conducted online, including consultations, diagnosis, treatment, monitoring, and health management. Internet healthcare utilizes various digital tools and platforms, such as websites, mobile applications, telemedicine platforms, and wearable devices, to deliver healthcare services remotely. Patients can access medical information, seek advice from healthcare professionals, schedule virtual appointments, receive remote monitoring, and access educational resources related to health and wellness.

- In providing healthcare services centered around diseases, such internet healthcare platforms offer health services categorized by disease types. Patients can make online appointments, seek medical advice, arrange for overseas medical consultations, and access inpatient information. An example of such a platform is 丁香医生.
- These internet healthcare platforms revolve around providing health services related to pharmaceuticals. They offer corresponding services based on their control over the pharmaceutical supply chain. Common business segments include online medication search, pharmaceutical consultations, medication purchase, and medication management, as exemplified by 京东医药馆.
- These internet platforms provide health services centered around content. They offer various types of health services, including text, voice, video, and live content, based on their respective health knowledge databases. Common apps and websites in this category include 快速问医生, 寻医问药网, and 妙健康等。

# Industry-specific applications of E-Commerce



## Online travel

Online travel refers to the process of planning, booking, and experiencing travel-related services and activities through online platforms. It involves using websites, mobile applications, and other digital resources to research and book flights, accommodations, transportation, tours, and other travel-related services. Through online travel platforms, individuals can search for and compare various travel options, including flights, hotels, vacation rentals, car rentals, and activities at their chosen destination. These platforms often provide comprehensive information, reviews, and ratings to help travellers make informed decisions. Online travel offers convenience, flexibility, and a wide range of choices for travellers. It allows them to explore different destinations, compare prices, and customize their itineraries according to their preferences. Additionally, online travel platforms often provide secure payment options and customer support, enhancing the overall travel experience.

- The B2B (Business-to-Business) model in tourism e-commerce refers to the business transactions and collaborations that occur between businesses within the travel industry. In this model, travel-related companies, such as travel agencies, tour operators, hotels, airlines, and car rental services, engage in electronic commerce to conduct business with other businesses rather than individual consumers.
- The B2C model in tourism e-commerce. Individual tourists can obtain information about travel destinations, design their own travel itineraries, and book accommodations and transportation (such as flights, hotels, and cruises) through travel websites or apps. They can also sign up for tour groups and purchase tickets and accommodations through online travel websites or apps. Typical examples include 携程旅行网 and 途牛旅游网.

# The impact of E-commerce on businesses

The traditional business operation model is "manufacturer(生产商) → wholesaler (批发商) → retailer (零售商) → consumer (消费者)," whereas e-commerce enables businesses to directly face consumers. This change will have effects on various aspects of businesses, including competition among businesses, procurement, production and processing, and marketing methods.

- **The impact on competition among businesses (企业间竞争)**

E-commerce has promoted economic growth and intensified competition among businesses, making innovation a key factor for success. In the e-commerce environment, traditional business models have undergone fundamental changes, and various industries have gradually segmented. E-commerce has given rise to numerous emerging sectors, such as online marketplaces, online finance, and delivery services specialized in catering to online shoppers.

- **The impact of e-commerce on procurement (采购)**

Traditional corporate procurement is generally achieved through methods such as supply and marketing cooperatives and ordering meetings. This traditional method of procuring raw materials is time-consuming and labor-intensive. E-commerce, on the other hand, fills this gap and becomes an effective way for businesses to reduce procurement costs. On one hand, the internet is an open, high-efficiency, cost-effective platform with a long operational time, forming an integrated information transmission and processing system, thereby creating a convenient and fast information channel, improving the cooperation between buyers and sellers. On the other hand, the e-commerce model can quickly find suitable partners among numerous suppliers through online platforms. This not only enables businesses to obtain lower procurement prices but also allows them to promptly access supplier information, such as prices and inventory levels

# The impact of E-commerce on businesses

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- **The impact on production and processing (生产加工)**

In traditional production management, businesses often deal with a wide variety of products, requiring various methods to address production-related challenges promptly. E-commerce has a significant impact on various aspects of businesses, including their production philosophy (理念), methods (方式), cycle (周期), and inventory management (库存管理).

- **The impact on marketing methods (营销)**

Traditional business activities often relied on salespeople to promote products and services, which could be challenging and less effective. The internet and e-commerce have introduced new marketing platforms with more precise and segmented marketing methods. Online advertising has become more flexible and diverse, reaching a broader audience at a lower average cost. Additionally, it has provided a more favorable environment for brand building, especially for small and medium-sized enterprises (SMEs).

# The impact of E-commerce on individuals

E-commerce allows people to engage in a wide range of activities online without the constraints of time and space. E-commerce has penetrated deeply into people's learning, daily life, and work, with its influence being widespread, primarily manifesting in three main areas.

- **Learning**

We can purchase books through e-commerce websites, including both e-books and physical books. Additionally, we can engage in online learning and receive web-based education.

- **Daily life**

E-commerce has changed the way people consume goods and services. In traditional business activities, enterprises take the lead and guide consumers towards accepting their products. In e-commerce, consumers have the autonomy to choose what products and services they wish to receive.

- **Work**

E-commerce has created numerous job opportunities, including roles such as marketing and promotion professionals, strategists, online sales representatives, procurement specialists, product developers, and warehouse managers. It has also streamlined the intermediary processes in business activities, significantly improving overall work efficiency.



Section 2

# Case analysis- Amazon

# Amazon-King of Online Retailing

亚马逊-网上零售之王

<https://www.youtube.com/watch?v=cmG5lwjzS48>



# King of Online Retailing-Amazon

<https://www.youtube.com/watch?v=StaMb1iwPNE>



# Foundation of Amazon

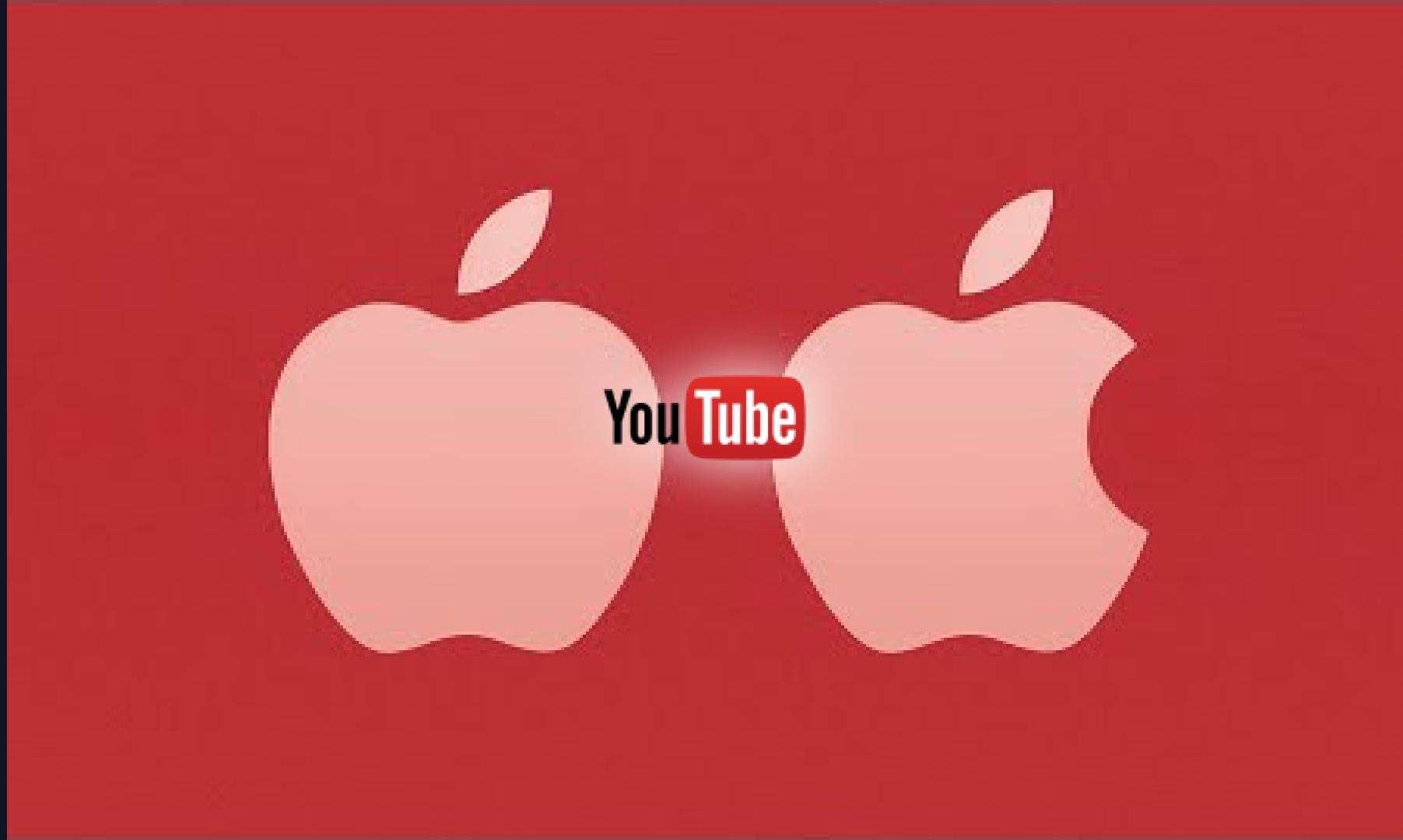
In July 1994, Jeff Bezos and his partners founded Amazon in his garage in Bellevue, Washington State. The initial team was composed of not only IT experts but also Rock & roll musicians. The small team looks unusual. However, it is the informal team that created the miracle of online retailing later.



When naming the website, Bezos decided to use a word beginning with "A" so that it would appear early in alphabetic order. Besides, Bezos thought that Amazon, a long-history river, was an "**exotic and different**" place just as he planned his store to be. Actually, Amazon originates from a warlike women tribe who lived in Asia Minor in Greek mythology. As time goes by, "Amazon" symbolizes **courage and ambition**. Naming this website as Amazon to some extent indicates Jeffrey Bezos's ambition to establish the kingdom of online retailing. Since 2000, Amazon's logotype has featured a curved arrow leading from A to Z, representing that they carry **every product from A to Z**, with the arrow shaped like a **smile**.

Could you give us an example with a good name or logo? and why it is good.

# Apple



# Xiaomi (小米)



# Business model of Amazon



Amazon employs a multi-level e-commerce strategy. Amazon started off by focusing on Business-to-Consumer relationships between itself and its customers, and Business-to-Business relationships between itself and its suppliers but it then moved to incorporate Customer-to-Business transactions as it realized the value of customer reviews as part of the product descriptions. It also facilitates customer to customer with the provision of the Amazon marketplace which act as an intermediary to facilitate consumer to consumer transactions. The company lets almost anyone sell almost anything using its platform. In addition to affiliate program that lets anybody post Amazon links and earn a commission on click through sales, there is a program which lets those affiliates build entire websites based on Amazon's platform.

# Business model of Amazon



Some other large e-commerce sellers use Amazon to sell their products in addition to selling them through their own websites. The sales are processed through Amazon and end up at individual sellers for processing and order fulfillment and Amazon leases space for these retailers. Amazon also employs the use of drop shippers or meta sellers. These are members or entities that advertise goods on Amazon and order these goods directly from other competing websites but usually from other Amazon members. These meta-sellers may have millions of products listed, have large transaction numbers, and are grouped alongside other less prolific members giving them credibility as just someone who has been in business for a long time.

# Financial performance of Amazon



Initially, Amazon chose a "slow growth" model which means there would be no profit for four or five years. The business model was so unusual in the late 1990s that many stockholders complained about the company not reaching profitability fast enough to justify investing in or even surviving in the long term. When the Internet bubble burst at the start of the 21st Century, destroying many companies in the process, Amazon survived and grew past the bubble burst to become a huge player in online retailing. In the fourth quarter of 2001, Amazon announced its first profit- of \$5 million, on revenues of more than \$1 billion. This profit margin, though extremely modest, proved to skeptics that Amazon's unconventional business model could succeed.

# Financial performance of Amazon



Compared to the physical bookstores and mail order catalogs, a remarkable strength of an online bookstore is the unlimited virtual warehouse. While the largest physical bookstores and mail order catalogs might offer 200,000 titles, an online bookstore could "carry" several times more. Amazon has been taking good advantage of the strength to provide the customers the high quality products with the low cost. The result is amazing:

Amazon's annual sales increased from \$15. 7 million in 1996 to \$48 billion in 2011. And its fourth quarterly sales increased from \$12. 95 billion in 2010 to \$17.43 billion in 2011. In July 2015, Amazon announced better-than-expected net income-\$92 million-for the second quarter. That news boosted the stock considerably and made CEO Bezos the biggest gainer of the year. His fortune jumped \$16. 5 billion, pushing him into the top five of The Forbes 400.

Twenty years after its foundation, Amazon has become the largest online bookstore as well as the 3rd largest bookstore all over the whole world. What enables Amazon to outstand from the e-retailing industry with the fierce competition?

# Critical Success Factors for Amazon



### Easy browsing and searching Webpage

Amazon's website offers a variety of functionalities such as browsing and searching by which a customer can easily find the products needed. Amazon's web-design was so good that it became a good example of e-commerce web designing. The company also invested heavily in a massive amount of server capacity for its website, especially to handle the excessive traffic during the December Christmas holiday season.

# Critical Success Factors for Amazon



## Useful product information

When visiting Amazon. com, a customer can not only get access to the product information such as author and price quickly but also learn about the inventory and delivery time. Besides, Amazon allows users to submit reviews to the web page of each product. Reviewers may rate the product on a rating scale from one to five stars. Amazon provides a badging option for reviewers which indicates the real name of the reviewer ( based on confirmation of a credit card account) or indicates that the reviewer is one of the top reviewers by popularity. Customers may comment or vote on the reviews, indicating whether or not they found it helpful to them. If a review is given enough "helpful" hits, it appears on the front page of the product. In 2010, Amazon was reported as being the largest single source of Internet consumer reviews.

# Critical Success Factors for Amazon



## Low price

Low price is one of the obvious advantages of e-tailing. The low price should be attributed to two reasons: one is that e-tailing cuts off the intermediaries, which leads to the relatively lower price compared the traditional offline sales; the other is that the tax free policy exempts the sales taxes charging the consumers. A notable thing is how Amazon outstands from the fierce competition since low price is a universal strategy adopted by most e-tailers. Actually, the value-added products and services contribute much to Amazon's success.

# Critical Success Factors for Amazon



### ✓ Various marketplace services

After realizing the threats from competitors like eBay, Amazon employed some new services such as online auctions. Online auction is a useful experiment to satisfy different customers' needs though it ended in failure. In addition, Amazon imported C2C by affiliating third-party sellers who are called associates. In 2008, about 40% of its sales derived from third-party sellers who sell products on Amazon. Associates are not only allowed to display and sell their products on Amazon but also receive a commission for referring customers to Amazon by placing links on their websites to Amazon if the referral results in a sale. Worldwide, Amazon has over 900,000 members in its affiliate programs. Unlike eBay, Amazon sellers do not have to maintain separate payment accounts since all payments are handled by Amazon. Associates can get access to the Amazon catalog directly on their websites by using Amazon Web Services (AWS) or XML service. A new affiliate product, aStore, allows associates to embed a subset of Amazon products within another website, or linked to another website. In June 2010, Amazon Seller Product Suggestions was launched to provide more transparency to sellers by recommending specific products to third-party sellers to sell on Amazon. Products suggested are based on customers' browsing history. The diversity of market services not only satisfies customers' demands but also enables the new profiting sources.

# Critical Success Factors for Amazon



### Outstanding Customer Relationship Management ( CRM)

"Earth's Most Customer- centric Company" has become the slogan of Amazon. Amazon has been emphasizing CRM. That is why Amazon's customers doubled during only nine months from 1998 to 1999 and its returning visitors contributed 72% to the quarterly sales in 1999. Amazon implements its CRM by the following measures:

#### 1. **Amazon Sales Rank (ASR) enables consumers to reach the most popular products quickly.**

ASR is a relative indicator of popularity that is updated hourly. Effectively, it is a "best sellers list" for the millions of products stocked by Amazon. Products that appear in the list enjoy additional exposure on the Amazon website, and this may lead to an increase in sales. In particular, products that experience large jumps (up or down) in their sales ranks may be included within Amazon's lists of "movers and shakers," and this also provides additional exposure that may lead to an increase in sales.

# Critical Success Factors for Amazon



- ✓ Outstanding Customer Relationship Management ( CRM)  
**2. Highly automated and efficient back-end support.**

Amazon differentiates itself from its competitors by the highly efficient delivery in the United States One/Two/Three Days Delivery. Moreover, it launched a new delivery program- One Hour Delivery. It even acquired a famous express mail company to hit the goal. Fulfillment centers are located in North America, Europe, and Asia, often near airports. These centers also provide warehousing and order fulfillment for third-party sellers. With this innovative program, a third-party seller can send inventory to an Amazon fulfillment center; when customers place orders, Amazon takes care of packing and shipping the products to their buyers. The customers can combine third-party seller products with Amazon items and receive Super Saving Shipping and other benefits, such as customer service and returns support directly from Amazon.

# Critical Success Factors for Amazon



- ✓ Outstanding Customer Relationship Management ( CRM)

### 3. Personalized services.

Amazon has been utilizing cookies, a small piece of data sent from a website and stored in the user's web browser, to capture consumers' needs. By virtue of cookies, Amazon records data on customers' behavior which enables it to offer or recommend an individual specific item, or bundles of items based upon preferences demonstrated through purchases or items visited. Though cookie has been proven an effective tool for personalization, problems such as privacy intrusion cause controversy.

# Critical Success Factors for Amazon



### The effective information management

The Linux-based technical infrastructure keeps Amazon running. As of 2005, Amazon had the world's three largest Linux databases. The central data warehouse of Amazon is made of 28 HP servers with four CPUs per node running Oracle database software. Amazon's technology architecture handles millions of back-end operations every day, as well as queries from more than half a million third-party sellers. Concerning the security due to hundreds of thousands of credit card numbers sent to Amazon's servers every day, Amazon employs Netscape Secure Commerce Server using the Secure Socket Layer protocol which stores all credit card details in a separate database. The technical infrastructure with high efficiency and security helps Amazon to keep the high website visiting.

# Critical Success Factors for Amazon



## Expansion through business alliances

From 2001 to August 2011, Amazon operated retail websites for Target, Sears Canada, Bebe Stores, Marks & Spencer, Mothercare, and Lacoste. For a growing number of enterprise clients, Amazon provides a unified multichannel platform where a customer can interact with some people they call the retail website, standalone in-store terminals, or phone-based customer service agents. On October 18, 2011, Amazon announced a partnership with DC Comics for the exclusive digital rights to many popular comics, including Superman, Batman, Green Lantern, The Sandman, and Watchmen. The partnership caused well-known bookstores like Barnes & Noble to remove these titles from their shelves.

# Critical Success Factors for Amazon



## Expansion through business alliances

In November 2013, Amazon announced a partnership with the United States Postal Service to begin delivering orders on Sundays. The service, included with Amazon's standard shipping rates, initiated in metropolitan areas of Los Angeles and New York due to the high-volume and inability to deliver timely, with plans to expand into Dallas, Houston, New Orleans, and Phoenix by 2014.

In addition, Amazon owns some companies which operate on their own brand. Audible. com is a seller and producer of spoken audio entertainment, information, and educational programming on the Internet. Audible sells digital audiobooks, radio, and TV programs, and audio versions of magazines and newspapers. Through its production arm, Audible Studios, Audible has also become the world's largest producer of downloadable audiobooks.

# Critical Success Factors for Amazon



Continuous innovations

### 1. One-Click order technology (One-Click Shopping).

As long as you shop on Amazon once, all your order-related information such as your name, address, and telephone number is stored by Amazon. Next time you shop again, Amazon fills in your information above automatically and what you have to do is choosing the products you need. So many e-tailers simulated the technology that consumers today can easily benefit from it on almost all the retailing websites. However, in the late 1990s when the online retailing field was still "a desert of innovation" Amazon can be awarded as "The Pioneer" of online innovation due to the technology.

# Critical Success Factors for Amazon



Continuous innovations

## 2. After realizing the huge potential of e-books.

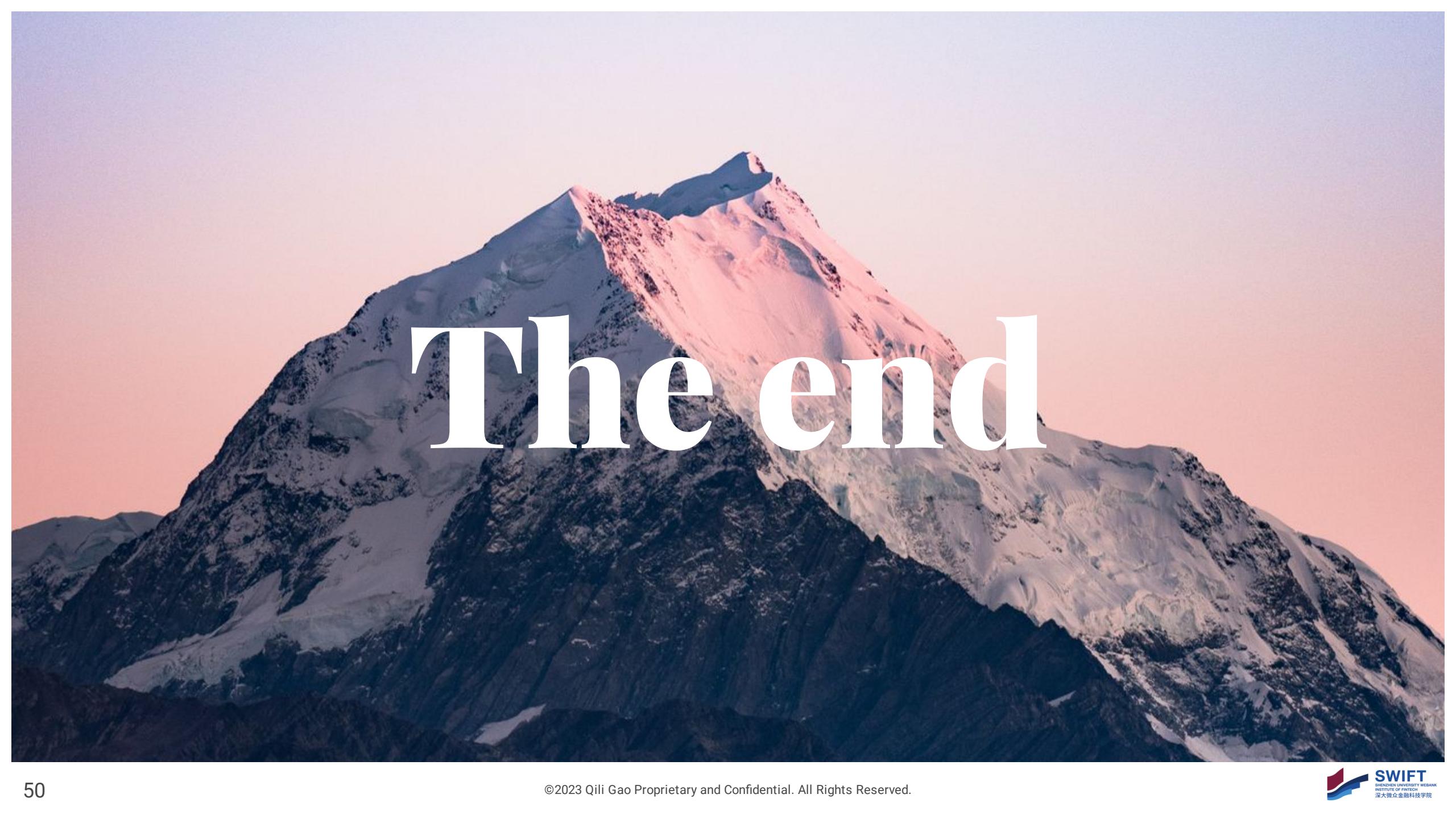
Amazon released its first e-book reader Kindle in 2007 and released other Kindle products such as Kindle Fire. Amazon Kindle devices enable users to download, browse, and read e-books, newspapers, magazines, blogs, and other digital media via wireless networking. The hardware platform, developed by Amazon subsidiary Lab126, began as a single device and now comprises a range of devices, including dedicated e-readers with E-ink electronic paper displays, and Android-based tablets with color LCD screens.

# Critical Success Factors for Amazon



- ✓ Continuous innovations
- 3. Obviously, Amazon has never been satisfied with being only an e-tailer. It has been seeking a new role in the market.

Today, it is a leading cloud computing service provider. Amazon Elastic Compute Cloud (EC2) is a central part of Amazon's cloud computing platform, Amazon Web Services (AWS). EC2 allows users to rent virtual computers on which to run their own computer applications. A user can create, launch, and terminate server instances as needed, paying by the hour for active servers, hence the term "elastic". Many businesses have benefited from EC2. For example, The New York Times, an influential newspaper chose EC2 when it planned to transform all the TIF data into PDF data. Compared to the traditional method estimated to cost a few months, it only took 36 hours to achieve the goals.



The end